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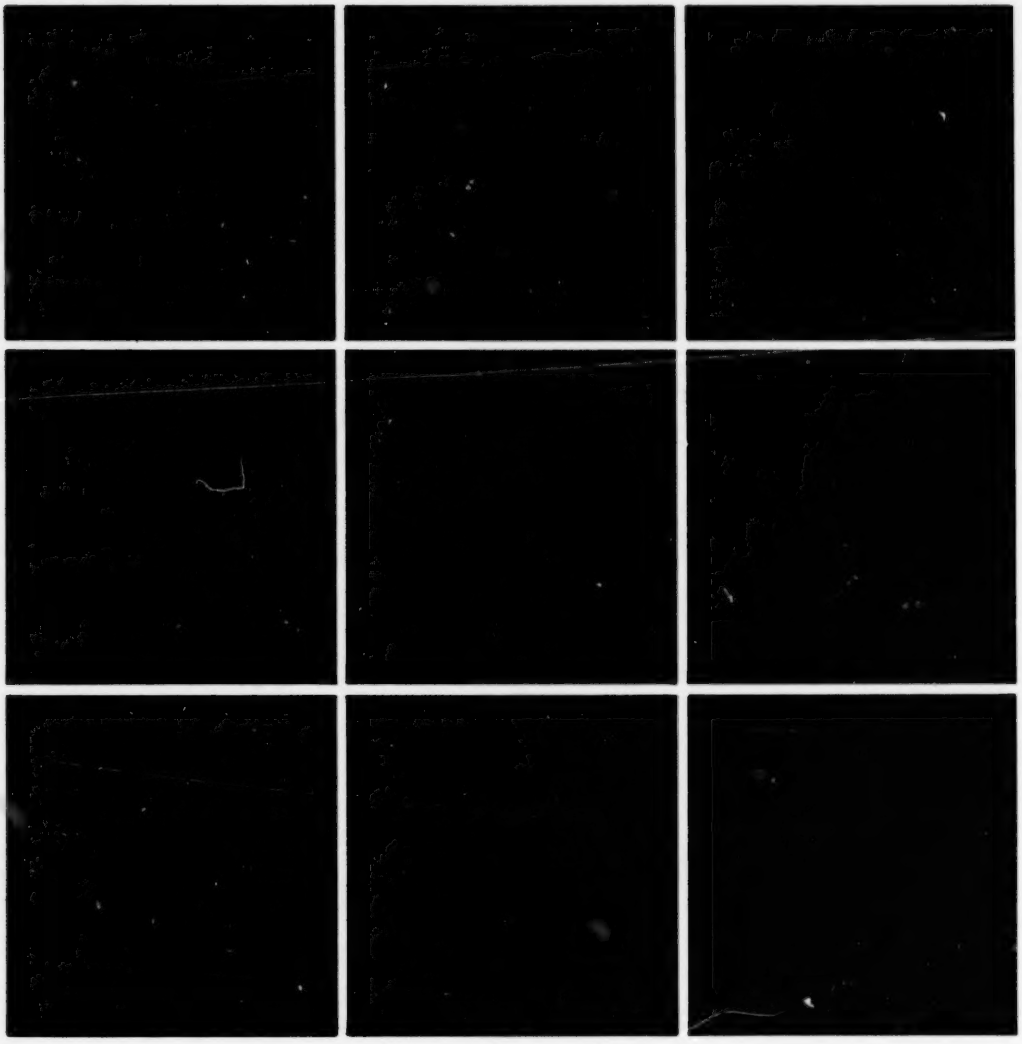

Manitoba Environmental Council

Manitoba Environmental Council Box 139, 139 Tuxedo Avenue, Winnipeg, Manitoba R3N 0H6

Our file: 618.6.11(AT)

The Honourable Jay Cowan,
Minister of Northern Affairs;
Environmental Management,
333 Legislative Bldg.
WINNIPEG, MB.
R3C 0V8

Dear Mr. Cowan:

I have the honour to present herewith, Annual Report Nine, of your Council.

This report details the Council's activities during the fiscal year ending March 31, 1981 and includes information regarding the Annual Meeting held on May 8, 1981.

Yours truly,

Bill Kennedy

Bill Kennedy,
Chairman.

Encl. (1)

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Annual Report Nine: 1981

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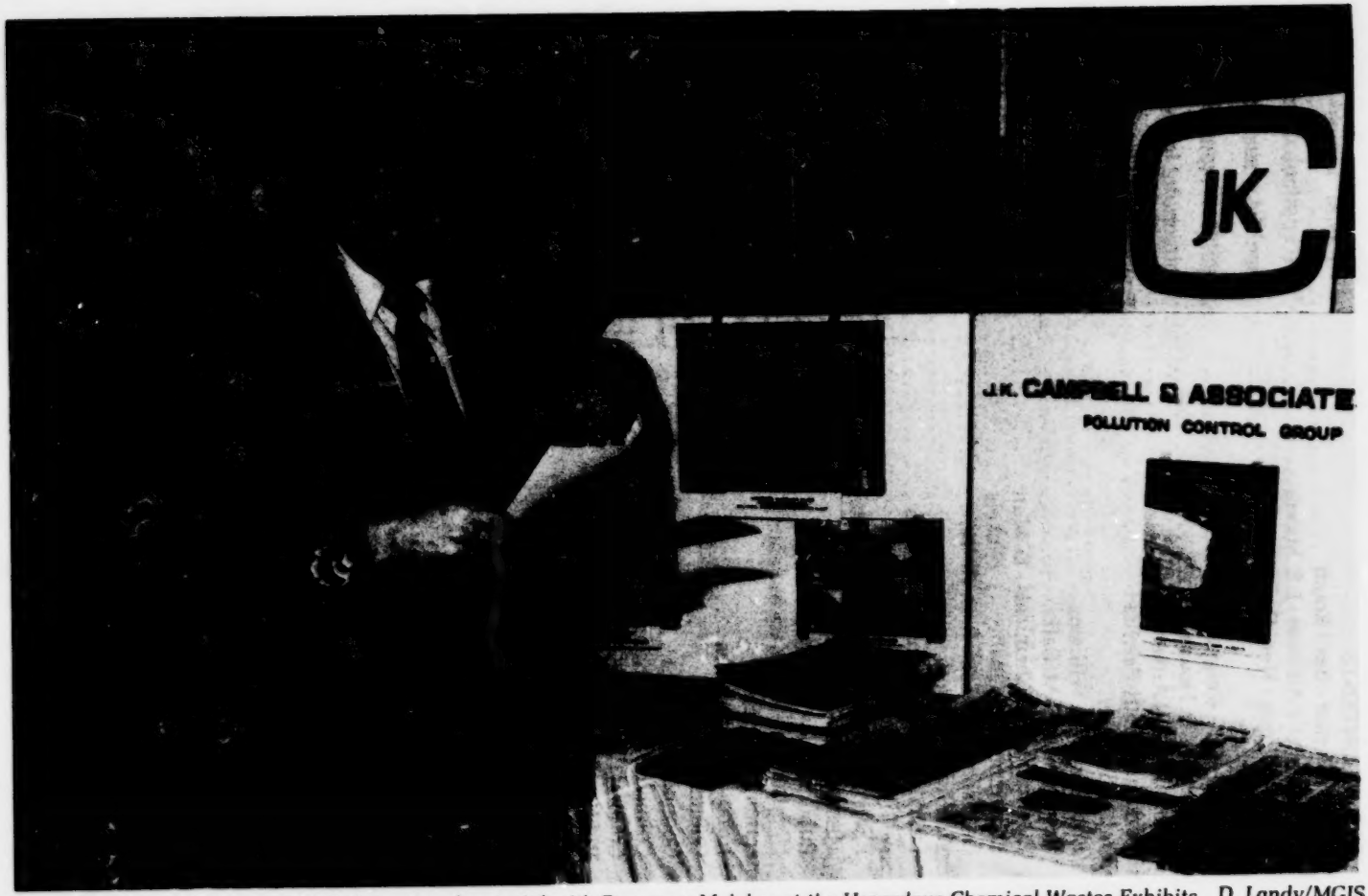

Harold MacDonald discusses his informational material with Rosemary Malaher at the Hazardous Chemical Wastes Exhibits D. Landy/MGIS

CHAIRMAN'S REPORT — BASIL ROTOFF

No sooner than I had been charged with the chairmanship of the Council than I had to represent the Council at the national meeting of advisory councils in St. Andrews-by-the-Sea. The site itself is idyllic and environmentally significant as much as the Bay of Funday is one of the richest spawning grounds of the Atlantic. It is being threatened by an oil refinery project, so they have a significant problem there. We had a chance to visit the site of the prospective refinery. The water route requires superb navigation to avoid the shoals especially during tidal changes. One wonders if the promoters have ever traversed this passage. The items on the agenda of that meeting were a review of councils' action regarding the Hecla resolutions, workshop on land use practices, workshop on shore zone management, which also included inland waters and the Great Lakes, workshop on long range transportation of air pollution, and the conservation of ecological preserves.

Resolutions were endorsed regarding long range transportation of air pollution or acid rain, shore zone management and ecological preserves. Land use was to be addressed again next year after examination of this question by individual councils in the intervening time. My own feeling is that the meeting lacked focus and therefore the trust of our Hecla conference.

Your Executive has given itself a goal to establish better contacts with the environmental organizations, both in government and in the private sector. This we did to a certain point. To date we have met with staff from the Environmental Management Division, who briefed the Executive on their work on long-range transportation of air pollution (acid rain), and have offered to make other presentations to the Board on subjects of our choice. These will begin, I hope, early next year. At these meetings we hope they will explain what they're doing in various programs which would spread out especially through the regional committees to the public at large.

It was our pleasure to meet with the new Chairman of the Clean Environment Commission, Mr. Stan Eagleton, and some members of the Commission, and explore various areas of mutual concern and ways in which we can collaborate. Tangible expression of the collaboration was our suggestion that consideration of the Shell River be given top priority in the Clean Environment Commission's forthcoming water quality hearings. We were thus able to assist the "Save the Shell" group by providing this input. Probably we can have some in other areas, especially now that the environmental legislation may be reviewed.

We also have had meetings with senior members of Ducks Unlimited and have offered our assistance in a land use conference to be held in March, 1981. There will be many participants. Further contacts are now being planned or worked on with people in Natural Resources, etc. We really are pursuing

Basil Rotoff D. Landy/MGIS

this idea of broadening our contacts and not just sending letters or memos but actually making personal contacts with people.

So far we haven't received any response from the Minister on the briefs adopted at our spring meeting. A report on the meeting and copies of the briefs were transmitted to the Minister on July the 2nd and a follow-up letter was sent recently to the Assistant Deputy Minister. The brief on energy related land use, introduction at the spring meeting, is being revised to strengthen and clarify some of its recommendations and will be completed for the annual meeting next spring. It's very intricate dealing with much legislation and has to be covered very thoroughly to be sure we don't say the wrong things.

In September I was asked to address the Annual Conference of the Manitoba Association of Urban municipalities on behalf of the Council. The topic was the transportation of dangerous goods and the presentation was well received.

In early October the Council participated in Canadian Environment Week, which should become an annual event under the aegis of Environment Canada. It included provincial and environmental agencies and NGO's like ourselves. The local representative of Environment Canada, Mr. Hamish Gavin, is to be complemented for his efforts and dedication and Council will send him a letter expressing our thanks as soon as the workload connected with the fall forum has eased off. I believe that a firm liaison has been established with this organization as well.

Finally, my report would not be complete if I failed to recognize the hard work and dedication of our Council staff and members particularly of the hard working forum committee, who have organized the biggest event in the Council's history. To Drs. Barry Webster, Derek Muir, Mrs. Malaher, and all those who have contributed to the success of this program, my heartfelt and most sincere thanks are offered.

* * *

Presented at Dec. 1, 1980 meeting.

CHAIRMAN'S REPORT — BASIL ROTOFF

The role of the Council as a whole was best expressed by Dr. Turnock in his 1977 Chairman's Report. He said, "The role of the Council is to advise the Minister on matters concerning the environment and to assist him in improving public knowledge in this area." This is what we have endeavoured to do. However, one has to realize that a great deal of activities have to be attended to to carry out this seemingly simple mandate. The 1980/81 Executive and the Board of Directors set themselves the following goals which were achieved to varying degrees of success: closer links with the Clean Environment Commission and Environment Management Division, a search for external financing, and the review of the Bylaws.

Advisory Activities.

In spite of a successful first meeting of combined technical committees, few committees were active this year. Some haven't even met once. However, thanks to some of the more active committees and some carry-over from 1980, the Council has performed reasonably well in its advisory capacity judging from the number and the quality of the briefs which have been prepared this year including of course the brief on environmental quality.

The greatest incentive to perform our advisory function, is of course, a certitude that our efforts are needed and appreciated. The new Minister, the Honorable Gary Filmon, has assured us that he intends to make full use of the Council. This was a morale booster and has been instrumental in the accelerated activities of the Council in the last few weeks.

Educational Activities.

To improve public knowledge on environmental matters, the Council held a Fall Forum on hazardous chemical wastes. In spite of some logistic difficulties which were beyond its control, the committee organized a very successful Forum. The participation was excellent. The presented papers as well as the discussions which followed will provide some outstanding material for the study which will soon be published.

Unfortunately, shortages of funds and organizational difficulties did not permit our annual cartoon contest to take place this year. This has always been an important vehicle for the dessemination of environmental information and should not be allowed to die. Mark this for the attention of the next chairman.

The early resignation of the chairman of the Education Committee prevented Council from developing closer ties with Manitoba's professional educators in order to support their efforts in environmental education. This is something the future executive will have to tackle.

In the area of publications, partly due to the lack of funds, the Council didn't catch up with the backlog. I think that was the story of our lives in the last few years. An important publication was the membership pamphlet which was long overdue. With the increased funding we have this year and no negative balance from the previous year, next year should see the completion of many outstanding publications, some of which are already nearly finished.

Outside Activities.

The council was represented at the Annual Meeting of Environmental Advisory Councils held in June, 1980 at St. Andrews-by-the-Sea. These meetings

are useful as they permit Councils from across Canada to exchange methods and concerns. The resolutions of this meeting shall be submitted to you for approval later on in this meeting.

The Council participated in a National Environment Week sponsored by Environment Canada which will, in all likelihood, become an annual event. A number of radio and television reviews were given during the occasion. The invitation to participate, tended by Mr. Harnish Gavin of the Environmental Protection Service, was appreciated.

The Council's advice was sought by Ducks Unlimited for the format of their Land Use conference although no acknowledgement of this fact was made on their part. The delegation from Council consisting of Prof. Selwood and myself attended.

Liaison with Other Agencies.

This was one of our priorities. As our aim was to strengthen links with other agencies, a series of meetings, both formal and informal, were held with the Clean Environment Commission and the Environmental Management Division. Three talks were given to the Board of Directors to inform them of the present activities of the Environmental Management Division. I held two very productive meetings with the Honourable Gary Filmon regarding his views on the role of the Council within his department. Later on today we will hear from him as he has accepted our invitation to address the Council.

Housekeeping and Administration.

The Council has been active in renewing its membership and broadening the membership base in the rural areas. This was very important; it was a priority even in past years and somehow it never got it off the ground; this year was very successful in their respect. The membership pamphlet mentioned previously is part of this effort. Revisions have been made to the constitution in order to bring it closer to actual practice. Some aspects of our relationship to the Department still remain to be resolved. In view of our experiences with the Fall Forum organization and our failure to meet certain crucial deadlines, I urge the next executive to take a serious look at our administrative procedures.

Finances.

It is with great relief that we acknowledge an increase in our budget to the sum of $25,800. This is the first substantial increase in 8 years. Our budget was $18,200 in 1973/74 and it went down to $15,000 in 1974/75. With inflation, the buying power of the present funding is equivalent to what we were getting in 1974/75. Of course, in terms of buying power we are not back up to where we were in 1973/74. To this date our efforts to obtain additional outside funding on a project basis have not met any success.

Other Activities.

The Council followed with great interest developments in the Garrison Diversion Project. Although many of our members are personally involved in this activity, it was not specifically addressed by any of our committees. One recurring problem which needs attention but which couldn't be tackled this year is the gradual siltation of Lake Dauphin and the haphazard regulation of water level. This is something to pass on to the next Executive to look at, because it seems to be a problem that raises quite a few important questions. It goes beyond just strictly the Lake Dauphin situation. The Council has kept abreast of developments with the Legislation on the Transportation of Hazardous Goods. I was invited to address the Association of Urban Municipalities on the subject.

Conclusion.

All in all, this has been an eventful year. To a certain degree we have achieved much of what we set out to achieve. Through the years, a few events have had a demoralizing effect on the Council and its work, but much of it has been reversed by now. If one were to look at this year in terms of good news/bad news, there were more good news than bad. I wish to thank all the Council's members, Directors, Committee Members, Chairmen, and all of the staff who have contributed to our success in this past year. Thank-you very much.

* * *

Presented at May, 1981 Council Meeting.

'Resource group' seeks additional funds from province

The Manitoba Environmental Council is in financial trouble and needs double its $17,000 grant from the provincial government to operate properly, its chairman said yesterday.

"Except for nominal increases we have been operating on the same budget for the past three years. We have asked for increased funding, but we never get a yes or a no," Basil Rotoff said in an interview at the council's annual meeting.

He said the council discussed soliciting funds from private industry, but considered it a move which would have brought on an "unhealthy relationship" with private enterprise, he said. "We want to to preserve our independence."

The council, composed of an array of volunteer academics, laymen and scientists, prepares briefs to the government on environmental issues.

The council was formed by the New Democratic Party government in 1972.

CITY

When the administration changed hands in 1977, the group was viewed by the Progressive Conservatives as "wide-eyed, sandal-wearing radicals", Rotoff said.

"We're hardly that. We're an independent, scientific resource group monitoring the quality of the environment. On certain occasions we haven't been flattering to the government, but we believe we are a valuable source of opinion. We don't take the antagonist approach like picketing city hall. We try not to be a political force."

At the same time, Rotoff said he is a realist, and "if a matter is of good political value it will get more money."

Rotoff said money is needed for independent technical services and travel so that council members can attend important national conferences.

Winnipeg Free Press, Dec. 2. '80

DEPUTY MINISTER'S ADDRESS — J. E. MASON

It's my pleasure to represent the Honourable Warner Jorgenson at this fall meeting of the Manitoba Environmental Council. I agree with the title of your forum this afternoon in that there are many problems and some solutions with respect to hazardous chemical wastes. Many will be addressed by the speakers at the forum.

The Environmental Protection Agency has apparently prepared a list of 350 toxic chemicals. No doubt a close scrutiny will reveal most of these chemicals are present in Manitoba in some amounts, perhaps ranging from a few grains in a research laboratory, to the 325 tonnes of arsenic trioxide recently removed from a warehouse in St. Pierre. As a first step toward finding solutions, it has been necessary to determine the chemicals that are present, their amounts, and equally important, where they are generated.

A program was initiated in 1977 to develop an inventory in hazardous wastes in western Canada. The details of conducting such an inventory will be described at the forum later today by the consulting firm of Reid, Crowther and Partners Ltd. One of the interesting aspects of this inventory was that it was a co-operative undertaking initially involving Manitoba, Saskatchewan, Alberta, Ontario and the Northwest Territories. Eventually, British Columbia and the Yukon also participated as the project moved into the phase of considering appropriate treatment systems and their locations.

A technical meeting is being held this week in Calgary to review the recommendations prepared by Reid, Crowther with respect to a complete hazardous waste management system in northern and western Canada. There is some validity to the idea of having a regional waste disposal system, however that is fraught with certain problems in the minds of the public. It's difficult to persuade people in Alberta that they should take hazardous wastes from Manitoba.

Many municipalities throughout Manitoba will be represented at your forum today. This is important, as the basic responsibility for the safe management of wastes rests with municipal authority within which they are generated. Recently a group of municipalities approached the Environmental Management Division for advice on developing a regional solid waste management system. A tour was arranged to visit collection, landfill, and incineration facilities in Northern Dakota and Minnesota. The particular installation that was viewed by some of the municipal representatives was an installation in Fargo, North Dakota where wastes are incinerated. The resultant heat is used to operate a very large sized laundry. An optimistic outlook exists for the co-operative construction of facilities that will serve a number of these communities.

Although it is in the broader context rather than simply chemical wastes, I

think it appropriate that rather than running in fear every time somebody says waste, we take a look at the potential for opportunity. Victor Wyatt School, in St. Vital, through the incineration of paper wastes from the school division, now receives up to 80% of its heat requirements, and hopefully it can reach 100%.

The co-operative spirit among levels of government must include the provincial level when we consider hazardous wastes. In some cases, expensive plants are needed to process relatively small though still highly hazardous waste. A proliferation of treatment plants in every province is just not practical. However, I don't think that we can conceive of the idea of moving every hazardous chemical waste out of the province of Manitoba because there is a degree of risk. When you start talking about hazardous wastes, you're talking about costs and risk. There's risk in transportation. There's a cost in transportation. So really we have to look constructively at some method of disposing of a certain number of these hazardous chemical wastes within our own boundaries.

I understand you will have an opportunity to view a film that has just been released by the U.S. Environmental Protection Agency. One of the interesting aspects of hazardous waste management dealt with in the film is the phenomenon known as the "Nimby Syndrome". For those of you who may not be familiar with this buzz-word it's the "not in my backyard" syndrome. Siting hazardous waste treatment facilities is a highly charged emotional issue. Plants are badly needed to properly handle growing quantities of hazardous wastes now being held in storage or being sent to facilities not designed for the purpose. The film depicts a public meeting and the reaction of residents in a small community faced with the possibility of solidified hazardous wastes being disposed of in their community.

A rational approach to the problems presented by hazardous chemicals is essential. As Barbara Bloom, Deputy Administrator of the U.S. Environmental Protection Agency recently stated, "It is imperative that we recognize the seriousness of our hazardous waste dilemma. But at the same time, we must avoid succumbing to a paralyzing anxiety about chemicals in our environment." This is sound advice. A forum such as you are holding today, with the opportunity it provides for the exchange of information, is valuable to all of us to view the problems in their proper perspective. I congratulate the Council for their choice of the topic at this year's fall forum. Thank you.

* * *

Presented at Dec. 1, 1980 meetng.

Free Press photographer Gerry Cairns meets "Envira" at the Hazardous Chemical Wastes Exhibits. *D. Landy/MGIS*

MINISTER'S ADDRESS — HON. GARY A. FILMON

May I thank you for inviting me to speak to you this afternoon. It's a pleasure to have an opportunity to meet many of you for the first time. I've known a number of you in the past. My wife says I should avoid referring to people as old friends so I won't say that, but I'm glad to see so many familiar faces and to have an opportunity to exchange information. Aside from the introductory remarks, I'll try to stay very close to my text because I understand it's being taped. I want to be sure that I don't contravene any public policy for some of the things I say today.

It's a privilege to be here, particularly with Basil, your chairman, because he and I go back a ways together. We were classmates in Engineering. When Basil and I had lunch recently, we were discussing plans and preparations for the 20th year reunion of the class, so that does date me a bit, as well as you. Basil, I apologize for that. But we have continued a friendship along the years. I served with him on the Manitoba Executive of the Community Planning Association of Canada when I was on the City Council. Both of us took our Master's programs at the same time. Although in different disciplines, our employers allowed us to take time off for classes. It proved to be a very good situation to be able to apply some of the things that we were learning and doing, along with our full-time employment.

Actually, I feel very much at home at the University although there have been many changes from the time I was a student here. In some respects, it hasn't changed all that much. As I browse through the university not only now, but at other times, I note that students are still spending much time in social endeavours, exchanging friendships, and an appropriate amount of time playing bridge. I'm glad to see that the priorities haven't changed, and that people are keeping their priorities straight while they're endeavouring to add to their formal learning.

We used to chuckle about many things that happened. I don't see Allen Lansdown here but I saw him at the Council luncheon. His brother-in-law was a classmate of ours, and, from time to time, part of the bridge group. I don't mean the structural bridge group. We always had a great deal of fun as classmates. I recall an incident that took place. We were anxious to leave as the end of a lecture was approaching. It was a couple of minutes before its end. People were starting to shuffle papers; putting things into their briefcase and getting ready to go. Obviously there wasn't anybody as stimulating as Dr. Lansdown as a lecturer. He started to get quite upset, and shouted "Order! Order". Somebody in the front row said "Two draft."

I'd like now to turn in some seriousness to my thoughts as a newcomer to the portfolio of Consumer & Corporate Affairs & Environment, and to give you some of my thoughts about environmental management and the very

The Honourable Gary A. Filmon *D. Landy/MGIS*

important task today in providing solutions to often very complex and difficult problems. I believe that from the first day that I was appointed and the very first meetings that I've had with my staff, I said that I think we have a proud record of environmental control in Manitoba. In many cases we're leading the country in our efforts to aid environmental preservation. I was very interested as you would be, I'm sure, to tour the W. M. Ward Technical Services Laboratory which we just opened about a month and a half ago and to see perhaps one of the most modern and technically capable facilities in the country. We're pleased to have it. I hope that any of you who are interested will avail yourselves of a tour. If you'll contact either my office or Dr. Bowen's, I'm sure that we could arrange for a tour to see this excellent facility that we now have in Manitoba for measurements, analyses, and technical evaluations of the environment and potential pollutants and the other things that can be done to ensure that we are

protecting the environment for all Manitobans.

As a Department, we have some very difficult tasks ahead of us. I'm sure that you would agree that we must address them head on if we're to provide comprehensive solutions. It's my view that during the course of the last several years society and interest groups in particular, have become very reactionary in regard to environmental concerns. I'm not convinced that this is a healthy process. I tend to think that the opposite is true. Because of the very complexity of environmental concerns today, it's important for everyone to be involved in trying to reach meaningful solutions to issues instead of automatically reacting to them in a negative tone. In this way more could be done to enhance our ability in making effective progress in the area of environmental management.

We were discussing this at lunch today, Probably the reactionary process or the reactionary situation today is in large measure due to the manner in which some of our legislation is set up. The Clean Environment Commission hearings process is in effect a reactionary type of situation and promotes a reactionary type of response. The way to get around that, of course, is to have more public input, more opportunity for public information. Then people don't have to react after something is well underway and they get the feeling that it's almost too late. They have to react negatively in order to turn things around. I would hope that in the course of the development of some rather major projects which are underway or about to be underway in Manitoba, we would be able to set it up in a way that allows public input and the public information process well ahead of events. Informed people such as yourselves can make their views known and can know that they were taken into account before the final decisions were made. That might help to overcome the negative reactionary response that today seems to come forward anytime people mention the environment.

Manitoba is now on the threshold of developing an extensive hazardous waste management plant. Just two weeks ago, the final report of the consulting firm of Reid, Crowther & Partners was unveiled. The report made a number of specific recommendations on how western and northern Canada can best come to grips with the growing problems associated with hazardous wastes. The three phase study was done at a cost of $250,000, jointly funded by the federal government, the four western provinces, Ontario, the Yukon, and the Northwest Territories. The report recommended the establishment of a $70 million regional system which would consist of a major incinerator in southeastern Alberta and physical chemical treatment plants with secure landfills in each of the other three western provinces. The report does not pinpoint any specific sites for treatment facilities, however it does list suitable candidate areas on the basis of certain criteria.

As I emphasized to the news media when the report was released, it shouldn't necessarily be construed as as blueprint for Manitoba's hazardous waste management system. It is however going to be a very important and effective tool in our overall waste management plan for this Province. The report recommends a regional system with a major facility in Alberta. At this time we haven't taken a position on that major recommendation as to whether or not it is in Manitoba's best interest. In principle, it may be that we ought to investigate further the possibility of a totally autonomous hazardous waste management system for our province only, without dependency on a facility in some other jurisdiction. Of course we have to recognize the economic realities of this situation. The regional proposal, as advocated by Reid, Crowther, has to be considered in the face of all the factors

that we're examining. According to Reid, Crowther a provincially autonomous system would be more expensive. Such a plan should not be ruled out simply because of economics. At the end of this month, Winnipeg will play host to a meeting of environmental Ministers involved in the most recent study. I expect that this subject of a regional vs. a provincial system will be fully discussed.

In many other jurisdictions, much public attention has been focused on the siting of hazardous waste disposal facilities. This often leads to what is commonly referred to as the backyard syndrome. People want it for the province, but not in their own backyard. I'm convinced that Manitobans can make a more realistic and rational response. Quite frankly I look to groups such as yours, the Manitoba Environmental Council, to assist me in encouraging Manitobans to help the government in addressing the problem of hazardous waste head-on. I know that you appreciate the value of a treatment facility. I feel we all agree that we must be in a position to deal with the treatment and disposal of all waste generated in Manitoba, both safely and in an environmentally accepted manner.

Many other jurisdictions have run into problems of siting primarily because they have not done an adequate job of informing and educating the public about the high technology now associated with hazardous waste management. We're talking about a very sophisticated type of operation which would be tightly managed by the operating agency, in this case, the government. The treatment facility we envision is not a barbed wire outpost where wastes are kept out of harm's way but rather a very extensive and comprehensive treatment center including all the most up to date forms of technological advancement. It's very important for us to address the myths that some people unfortunately still hold toward hazardous waste. Hazardous waste can conjure up visions of huge cauldrons of bubbling green liquids. This could not be further from the truth. In fact, many people forget that some of the waste we're talking about are no further away than just their kitchen sink.

In any event, I can assure you that we intend to mount a fairly extensive education campaign to inform Manitobans about hazardous waste management technology. Since the release of the Reid, Crowther report, we have received some very encouraging reaction from the public to the Manitoba part of plans for the hazardous waste management system. In fact, we've already received word from at least two areas that they might be interested in encouraging a facility to be located in their specific areas. This is encouraging. I'm mindful that it is indicative of the progressive-minded individuals that we find in this Province. As you can well appreciate, there are certain economic benefits to be reaped from having a facility located in any particular area. In many cases it might also serve to solve a local municipal waste problem.

However, I should emphasize that in Manitoba we are still considering all options at this stage. We have far from ruled out the possibility of locating a treatment plant in an urban setting. Also, an integral part of our hazardous waste management plan involves public participation. We fully recognize the importance of the public being involved in this issue. Specific plans in terms of hearings, informational meetings, and other aspects of the public information process will be announced in the very near future. Industry, environmentalists, and consumers should be aware of the plan. It's very important for industry to be involved in our hazardous waste management plan, particularly those who are themselves waste generators. It's incumbent upon them to assist us in

tailormaking the best possible system that will suit Manitoba's requirements.

The Reid, Crowther study in its various phases went through a hierarchy of preferred methods of dealing with hazardous waste. The hierarchy started with recycling of the wastes generated on site. The second was treatment and disposal on site in those areas in which the wastes were generated. Thirdly was the rational system of collection, distribution, and disposal on a totally provincially and regionally managed basis. That still is very important in our minds when we look at how it's to be dealt with in the future.

I've commented enough on the general direction we're taking in hazardous waste management. However, I must remind you that the Council can play a very effective role in this entire process. Specifically, the Council could look at directing some of its energies towards helping dispel some of the myths about hazardous waste that I have mentioned earlier, and working towards helping to educate Manitobans on the problem.

Before I conclude, I'd like to leave you with some thoughts on how I view the role of the Manitoba Environmental Council. Let me state at the outset that I agree with the original premise on which the Council was established back in 1972, namely, that the Council serves as an advisory body to the Minister of the Evironment. I know that in the past you've always endeavoured to fulfill your mandate. Your efforts have been very gratefully appreciated. It is very important to get a broad range of perspectives when dealing with environmental issues. The Council can provide this alternative perspective which can assist our government considerably in reaching solutions to the environmental concerns that confront us. I've said this before. I believe it to be true as someone who hasn't spent a great deal of time in government, but can speak as one who has participated in government both at the civic and at the provincial level. I haven't had the opportunity to participate at the federal level, but I'm sure that it applies. Perhaps it applies even more strongly. There's always a tendency of those who are in government, this applies regardless of political stripe to feel after a period of time that everything that's important in the city, if that's their area of jurisdiction, or the province, if that's their area of jurisdiction, or the country, if that's their area of jurisdiction, happens in the legislature or the building in which they operate and make their decisions. My view is that everything that's important is happening outside that building. It's how we in government respond to what's happening out there that's a measure of our success and ability. That's why you're very important. You're on the firing line; you're the people that are making things happen in society and concerned about the things that are happening. You can tell us what we should be reacting and the manner in which we should be dealing with what's happening out in society.

In continuing your important task of providing my ministry with various perspectives of environmental management, I'd also like to remind you about the realities of our Department's sphere of influence. I fully realize that, in many aspects, the word "environment" has come to mean something different to all of us. It's come to have very, very broad meanings, but in terms of what I, or my Department can be responsible is limited. We're legislatively constrained to the mandate of the Department of Consumer And Corporate Affairs And Environment. It's much more helpful if the subjects you discuss and your recommendations to me as the Minister of the Environment are focused on areas over which I have some influence.

As I indicated earlier, I wholeheartedly agree with the function

that you've been entrusted with. I plan on taking advantage of your vast expertise as much as possible in the months ahead. I thank you very much for inviting me here. I wish you well in your deliberations. This feeling not only applies on my behalf but on behalf of my Department and certainly on behalf of the government of the Province.

As mentioned previously, I will not be able to stay with you all afternoon. However, I would certainly be glad to have a short question and answer period if there are subjects that you would like to either question me about, or I can remain for a little while if you wish to have a discussion in my presence. Thank you very much.

MR. BILL KENNEDY: Mr. Minister, the government has recently announced two fairly major industrial development projects. One is the potash project in the St. Lazare-MacAulay part of the Province; the other is an Alcan project, possibly east of Winnipeg. Would you require in the planning of these projects that they would come under the Manitoba Environmental Assessment and Review procedure?

MR. FILMON: The legislation in that procedure applies only to government projects, so legislatively I can't require it to happen. Without revealing something that's under review by Cabinet I can say that in effect it's our intention to call that kind of process into the picture. That would mean a variety of different things, one of which would be to have the agreement of the people who are involved. This would require Alcan, or IMC in the potash case, to agree that they would accept the findings of such a review and they would implement them. At the moment we're looking at some options and variations of that procedure because in that process we may want to involve the Clean Environment Commission. We may not. We're looking at those options. However, we will, I can assure you, be looking for a procedure that does involve a mechanism for public input, that does involve an impact statement being prepared and does have some type of formal environmental assessment review that would have binding obligations at its conclusion on the project. In other words, it would have to be agreed to. We may have to put that into the agreements that we sign with the two groups involved. We may have to pass legislation to ensure that, but we're looking at those options. I hope to be able to make an announcement on that fairly shortly, because we think that they should be treated the way everyone else in Manitoba is treated and required to meet all of the environmental pollution control standards that we would set for anybody in this province. It's important for the procedure to come out publicly and very shortly so that there's no misunderstanding about it before agreements are signed, before those people come in to spend a billion or a billion and a half dollars in this Province.

MR. KENNEDY: Thank you Mr. Minister. I'm sure that the Council will have an ongoing interest in maintaining a close contact with you on these matters.

MR. R. D. HOWARD: If I can get close to the Honourable Minister, I am going to present him with two "Stop Garrison" buttons and a Garrison gang reunion notice . . .

MR. FILMON: Thank you very much.

DR. W. J. TURNOCK: I have a followup on that last question. Before lunch we were discussing the Alcan arrangements and the environmental concerns. Could you tell us to what extent the government investigated the pluses and minuses of the environment just as they did the finances and transportation before proceeding to this stage?

MR. FILMON: My department has been involved with them for quite some time now. Dr. Bowen and some of his staff have visited their most recently

constructed plant and other facilities at Grande Baie. They have a great deal of technical information on the processes, the emissions of the processes, and on the potential hazards. We were involved right along side the economic development people. I say "we" without including myself because I'm fairly new to this Department, but my Department was involved long before I was.

DR. TURNOCK: Just a postcript. There was nothing on this in your press releases, that's why the question.

MR. FILMON: Good point.

DR. TURNOCK: Shouldh've been.

MR. FILMON: Right.

MR. WAYNE NEILY: I'm Interested in the point you made concerning having our activities focussing only on things within the realm of your Department. As I'm sure you're aware, the scope has changed over the years as to what we may be concerned with here. Many of us are still very interested in issues concerning wildlife, and such subjects as land use. Have you any suggestions as to how we can have effective input into such things?

MR. FILMON: I suppose I was thinking more in terms of discussions about greater use of public transit and items of this nature than I was about subjects that might apply to natural resources. I'm sure that I could prevail upon my colleague, the Honourable Harry Enns, to not only take notice of your concerns, but to respond to you on them and include them in his legislative deliberations and all the things that come under his Department. I don't think that that would be a problem.

COUNCILLOR LLOYD DAVIES: Mr. Filmon, please, could you tell me so that I could go back to assure the people of Selkirk that Winnipeg is going to do something about that river, before we sue the City of Winnipeg, which we can't afford to do anyway?

MR. FILMON: As you probably know, the City of Winnipeg isn't under the Clean Environment Commission in terms of what they're doing. They were specifically excluded for whatever reason. I know that the hearings that the Clean Environment Commission held about water quality standards certainly highlighted the concerns that are there, the valid concerns about the water quality of the Red River in the Selkirk area. I also have a copy of a letter from Pat Joyce, the Chairman of your Waterworks Committee who wrote to Mayor Norrie this week asking that the City enter into discussions with the Town of Selkirk to see what solutions there are to cleaning up the Red River. I think he rightly suggested that the City wasn't necessarily acting consistently in their response to the water and sewage lagoon effluent going into Sturgeon Creek or another issue, Shoal Lake, vs. their involvement with the effluent that goes into Red River. So I think that's exactly the kind of thing that has to take place. Somebody should look at things consistently across the board and say everybody should have an obligation to meet the same standards. Obviously that isn't the case now so it has to be brought out in the open.

MR. ROTOFF: Any more questions? There being none, it remains to me to thank the Honourable Gary Filmon who has come and shared his thoughts with us. From his presentation you have seen that we do indeed have a friend and a person who understands our concerns and who is sympathetic to our concerns. We noticed from the questions and answers that he's one of the few Ministers who actually reads what crosses his desk and is aware of it.

* * *

Presented at May 8, 1981 Council meeting.

CENTRAL — J. A. KNIGHT

The Central Region has many environmental concerns such as transportation of hazardous materials and their use, e.g. MacGregor spill. Having learned from that experience hopefully in the future the Railways, Municipalities, the Manitoba and Federal governments will be better prepared when a similar situation occurs again.

Another problem of concern is from used chemical containers which are being dumped in ditches on roadsides and in Municipal dumps. The Manitoba Government had an experimental program of crushing and shredding these containers in 1981. The R.M. of North Norfolk have collected a supply of these containers in one location and hopefully this program of compacting and shredding these containers will be continued in the future.

Drainage in rural areas are causing concern, i.e. irrigation and tile drainage. There should be a preinstallation Monitoring Program established as there is a lack of knowledge of risks and problems associated with this type of farming operation, e.g. soil and ground water levels, possible pollution with fertilizers, pesticides and soil sterilants.

The Garrison Diversion has implications for water quality to cities and towns along the Souris, Assiniboine and Red Rivers and threats to fish species in our lakes and streams. Good water quality is essential for the Campbell Soup Plant and McCain Foods, all operating in the city of Portage la Prairie.

Custom applicators of aerial spraying are sometimes careless in applications around small holdings and with their disposal of empty containers. Anyone observing violations should phone their Public Health Inspector. The Inspector should report back to Home owner on actions taken.

* * *

Received February 8, 1982.

EASTERN — R. D. HOWARD

The hazardous materials used in agriculture are necessities of life, to provide foodstuffs on an economically viable basis. There's a great deal of resistance to discussing the matter openly among farmers and generally askance at anyone doing it behind their back. There is an accord, however, among those concerned about the control or attempt to eradicate Dutch Elm disease under the newly announced program. The intention is to designate one or two communities in which demonstration programs would be put on to show the rest of the province and ourselves how integrated control procedures can be used to control Dutch Elm disease. The integrated sanitation program would include immediate removal of infected trees, destruction of dead and dying elms, insecticide spraying, good tree maintenence and pruning. Carman is being considered as one of the two communities because the first reported case occurred there only recently and it has a large population of elm trees.

The disposal of toxic and hazardous waste materials has been an ongoing problem in such areas as St. Pierre and the R.M. of Springfield. The answer is not to ship it to Gimli for storage. For this reason we are pleased to see that Environment Canada, in cooperation with all jurisdictions in northern and western Canada, is developing a waste management plan. While none of the proposals by Reid, Crowther and Partners are locked in stone, there is some concern about the nature of the designated site in eastern Manitoba.

The problem of the site is that it is located within the Roseau River system, which is subject to periodic flooding. This is the result of the geography of the area which has been described in a 1975 report to the International Joint Commission. "The end product of all these geological processes is a rather level plain broken occasionally by beach ridges and sandy uplands and, to some extent, by the poorly defined channel of the river itself. Underlying much of the surface are thick sequences of lake silts and clays. Because of the low relief and relative impermeability of the sediments, particularly the clays, the water table is normally high. As a result, peat bogs are a common surface occurrence in localized depressions where they may be as much as 20 feet thick." The concern with the site is therefore that it may periodically be flushed out by flood waters and the materials would eventually end up in the Red River system.

The Eastern region also has several other concerns which merit being mentioned. The Whiteshell Master plan is an important step in developmental planning but there is a need for follow-up. Ontario has had a plan since 1968 but it has not been finalized. The situation of Shoal Lake is being watched with attention. The Red River Flood Coalition is receiving full support from our region. These generalizations provide a conclusion to my report.

INTERLAKE — BILL AITKEN

The Interlake Region is delighted with the news that the Garrison Diversion Project as currently authorized has been stopped, at least for the time being. We are cautiously optimistic that the McClusky Canal will never be used to bring Missouri River water across into the Hudson Bay Watershed.

The residents in and around Gimli still live in fear of some accident involving the hazardous materials in temporary storage at the Industrial Park. They are patient, however, with the promise that a permanent facility will soon be located at a more suitable location.

City of Winnipeg wastes are being discharged into the Red River and are causing a serious detrimental effect to municipal water supplies and conditions of Lake Winnipeg.

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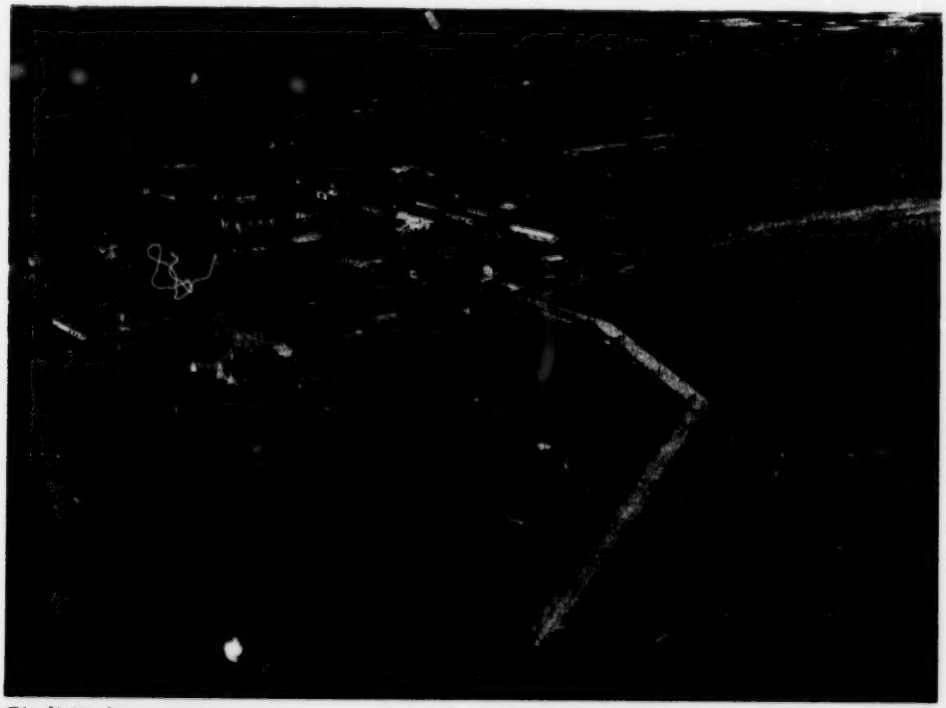
Presented at May 8, 1981 Council Meeting.



Gimli Harbour (1973) *MGIS*

PARKLAND — BETTY PAWLICKI

The water resources of the Parkland area head the list of the region's environmental concerns. The "Save the Shell" committee have won their battle and the effluent from the Town of Roblin's sewage lagoon is being pumped onto fields and is being used as a fertilizer rather than being dumped into the Shell River. The Shell River has been saved from pollution and the downstream recreational areas will be able to continue to fulfill their function for the people of the area.

The deterioration of Lake Dauphin has been of concern to the cottage owners and area residents. This lake has been subjected to heavy silting. It has been gradually deteriorating and seems to be approaching a critical stage. There seems to be some question as to whether or not the dam on the Mossey River is being properly utilized to maintain lake levels or is being adjusted by anyone with access to it, to adjust it for their own personal needs. In this respect the cottage owners' views of a good lake level, moderately high level, clash with those of the farmers, who consider low water as providing more land for hay production.

Lake Winnipegosis has long been concerned about the long range effects that the completion of the Garrison Diversion would have on the fisheries. Now the people of that area have an added concern. They have information to the effect that the lake levels are to be regulated by Hydro in order to utilize the lake as a storage basin to maintain levels on Lake Manitoba and Lake Winnipeg via the Fairford River.

The regulation of Lake Winnipeg had a detrimental effect on Lake St. Martin in the Fairford system. The regulation of one lake seems to have effects that reach far beyond the lake being regulated. Residents of the area feel that regulation of Lake Winnipegosis would affect much beach area and waterfowl nesting areas.

Last year's forest fires raised a concern for reforestation. Many acres of forest in the Parkland were destroyed, with the Porcupine Forest Reserve being the area most affected. Residents of the Swan River area felt that a speedy replanting program by the Provincial Government or the companies cutting timber, would be a start on returning this area to its role as a source of timber and as a fine recreational area. Habitat for much wildlife was lost in this fire. Reforestation would lead to conditions favouring a return of wildlife.

* * *

Presented at May 8, 1981 Council Meeting.

EDUCATION — H. WILLIAMS

This committee is becoming more active after a long period of dormancy. Its function, in case you may not be aware, is concerned with the nature and the amount of environmental education in Manitoba. As we understand our mandate, it includes monitoring, assessing, and preparing briefs to the Council for presentation to the Minister. We're concerned with environmental education by government, by schools, and by various organizations. We include in this, as one aspect of environmental education, the dissemination of information to the public by various provincial agencies.

The committee has been reviewing a number of aspects in environmental education. One of them is related to the public schools. We have discussed, to some extent, the school curriculum and the amount of environmental education contained in the curriculum. It appears that there is plenty in the curriculum but there may be a problem of implementation in the schools. We may not have a teacher-proof curriculum but perhaps some curriculum-proof teachers. We see a problem in terms of the individual teachers but I don't know how we would approach it. This view, I should add, is not based on any analysis or detailed study of the curriculum but is derived from experience of the Committee. In my own case I have worked at the University of Manitoba with teachers and on curriculum committees. There is plenty of emphasis in the curriculum on environmental education. My observations from talking with teachers in the schools is that there is less concern then I would like to see. There is probably room for some effort in that direction. However at this point, the Committee has no recommendation regarding this problem.

Our other activity to date was to review the information series pamphlets put out by the former Department of Mines, Resources and Environmental Management. We found in our review and in discussion with the authors of these pamphlets that they needed updating and revision before being reissued. This was not only our view but the view of the authors. We also noted that the subject matter was somewhat fragmented. It was difficult to know why one topic was selected, such as polluted air, and then another on something else, showing a lack of co-ordinated comprehensive effort on environmental information and education from a provincial level. As a result of this review, we have offered the following brief to the Council. It should not be interpreted as criticism of the series or the material. Obviously it is implicit that this or other series should be funded appropriately. We didn't know how to include this because we had no facts about available money, etc.

* * *

Presentation (revised) at Dec. 1, 1980 meeting.

Brief Re: Man. Govt. Environmental Information

RECOMMENDATION

The Manitoba Environment Council recommends to its Minster that he seek the co-operation of appropriate Ministers to establish a committee to develop a comprehensive, integrated and systematic approach to provision of information on Manitoba's environment, to be implemented by the Department, with co-ordination between Departments, such as Natural Resources, Agriculture, Education, Economic Development and Tourism, Energy and Mines and including Crown and Extra-departmental Agencies, such as Manitoba Hydro and the Manitoba Museum of Man and Nature.

BACKGROUND

A review was undertaken of the Information Series of pamphlets published by the Environmental Management Division of the then Department of Mines, Resources and Environmental Management. These pamphlets are informative and useful but according to their authors should be updated before being reprinted again. We agree that any pamphlets in this Series that need to be reprinted should be revised. We note, however, the topics seem randomly selected and do not illustrate inter-relationships among features of the Manitoba environment, nor provide a comprehensive picture of it. We suspect that the same situation pertains to environmental publications produced and/or published by other Departments.

There needs to be a clearer definition of the objectives of this Series and its role in the overall plan for dissemination of information on Manitoba's environment. The ecosystem concept could form the basis for a series of publications and/or other media interpreting the natural environment and man's impact upon it. Target groups for this education effort should include the general public, both urban and rural, educators, school groups, organizations and native groups.

* * *

Adopted Dec. 1, 1980 Council meeting.

Harvey Williams and Wayne Neily prepare their Environmental Information brief *J.J.K.*

ENERGY — LEWIS McCALL

During the current year the Council's Board of Directors was informed of citizen concerns regarding the possible flooding of lands surrounding Lake Winnipegosis. The Board, in turn, directed the Energy Committee to investigate the matter.

At this point in time the Committee Chairman would like to present a short preliminary report based on an initial review of the situation vis-a-vis power development at Lake Winnipegosis.

Where a body or flow of water is perceived to have the potential for hydroelectric development, the Provincial Government may establish, through an Order-in-Council, what is called a *Water Power Storage Reserve* on Crown Lands surrounding the designated water resource. It is our understanding that proposals regarding such Reserves are generally initiated by the Water Rssources Branch of the Department of Natural Resources after consultation with appropriate officials of Manitoba Hydro. A proposed Power Reserve becomes official only after the passage of an Order-in-Council.

The establishment of a Power Reserve directly affects the use of Crown Lands within the designated reserve area. Specifically, the establishment of a Power Reserve operates to prevent the sale of Crown Land to private interests and to restrict the use of the land with respect to other types of development. Privately held lands within a Power Reserve area do not appear to be directly affected by the establishment of the reserve alone.

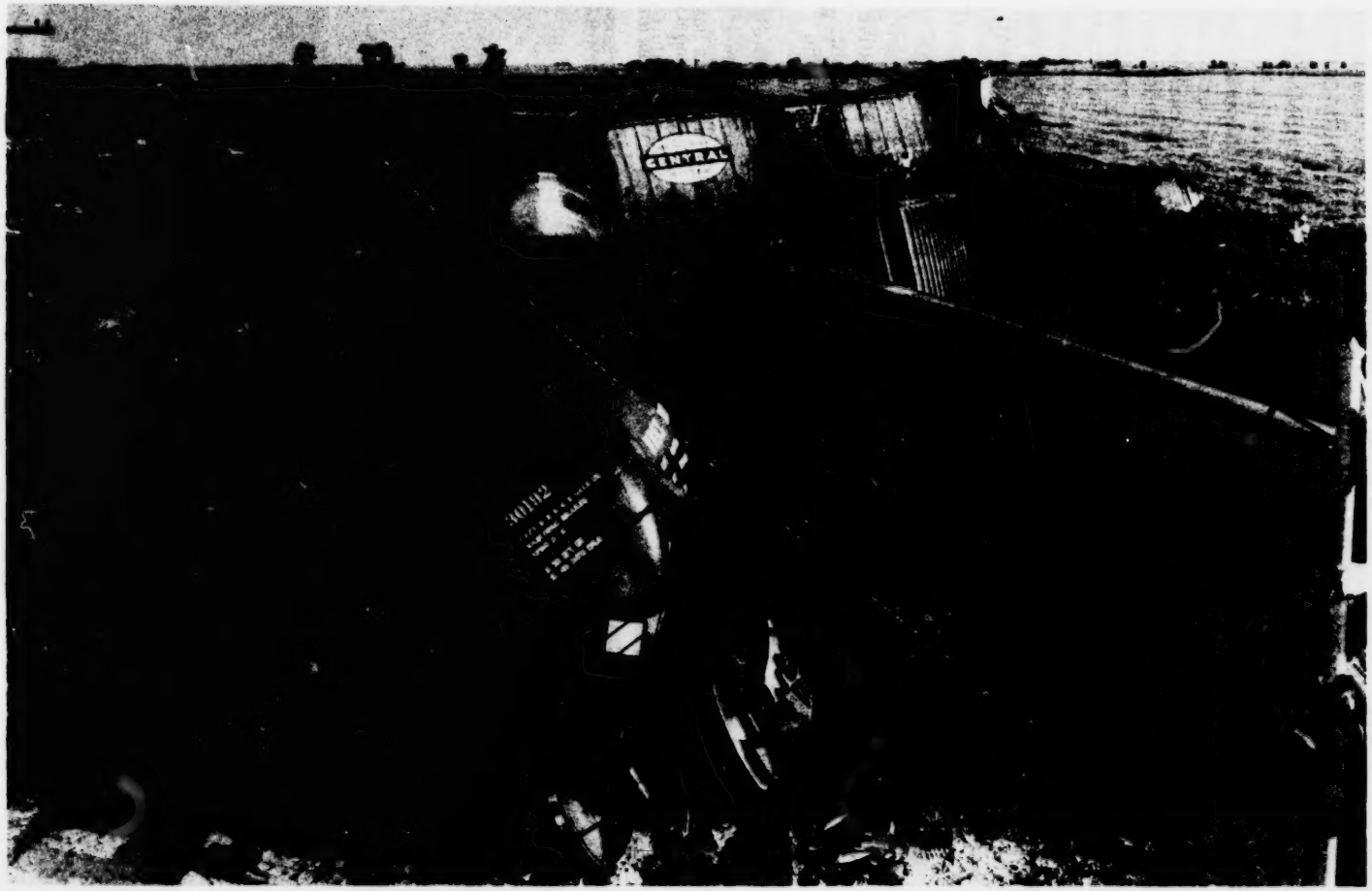
In the case of Lake Winnipegosis, the potential for hydroelectric development was perceived over 20 years ago. Accordingly, the boundaries of a proposed reserve were determined. At that time the use of Lake Winnipegosis was seen as one of two or more alternative schemes of hydroelectric development. An alternative that did not involve the Lake was given priority in the development of hydroelectric power. As a result, the matter of the proposed Power Reserve regarding Lake Winnipegosis has remained *in limbo* for over 20 years. It would appear that the area is viewed as an *unofficial reserve* by certain governmental organizations and as a *non-reserve* by others.

During the past year a recommendation regarding the establishment of an official Power Reserve around Lake Winnipegosis was forwarded to the appropriate Provincial Government Minister. As at April 15, 1981, no action had been taken. Because the matter is still under consideration, the Energy Committee has been unable to establish the nature of the recommendation.

In the opinion of the Committee Chairman, specific recommendations regarding matters arising from the various aspects of the current situation would be inappropriate until a more detailed investigation has been completed.

* * *

Presented at May 8, 1981 Meeting.



Train derailment (liquid propane) near Dominion City, Aug. 5, '81 *Gerard Kwiatkowski/Courtesy Winnipeg Sun*

ENVIRONMENTAL CHEMICALS — D. MUIR

My report for this December meeting is very short. We have, as you know no briefs but I did want to indicate that our Committee has been active this fall, because three of the members of the Committee have organized the fall forum to be held this afternoon. That has been our main activity.

We did meet in September as part of the All-Technical Committee meeting. The minutes of that meeting haven't been distributed so I can only indicate some of the concerns and what we're hoping to do before the spring meeting. The Transport of Dangerous Goods Act has just been passed by the Federal Government. We are going to look into what has been done in Manitoba in regard to the implementation of this act. This is rather important in view of some of the accidents we've had with hazardous chemicals. We are thinking of writing a letter to the Minister and asking him what was being done in this area.

We also discussed at some length of developing a list of alternative pesticides for the government to use. They bought a large volume of 2,4,5,T only to discover that most other states and provinces have banned it. There's a number of other chemicals on the market which the government either purchases or perhaps recommends purchasing. We thought we should give them some alternatives, some compounds that might be less harmful to the environment. Right now a lot of pentachlorophenol is being used in Manitoba. This product contains dioxins and it's potentially quite hazardous. There are alternative fungicides that can be used. There are a number of other examples similar to this one. We think that an alternatives list would be useful. There doesn't seem to be any inclination on the part of the Environmental Management Division to do such things or to anticipate problems with chemicals, in particular pesticide chemicals.

This concludes my report and I hope you will enjoy the forum this afternoon.

At this May, 1982 meeting of the Council, I wish to report that the Committee met only once this year and at that time, in September, we prepared a list of possible subjects to work on. Unfortunately, we did not get together again formally as a group to carry out these proposals. This was due to a number of reasons. One was that several of the members were involved quite intensively with the Fall Forum. The other was that the minutes of our September meeting were not distributed until January so we had a hard time getting together. However, we did manage to put together two briefs for consideration by Council.

The first deals with the program which is carried out by the Environmental Management Division for disposal of hazardous chemicals from schools and hospitals. The idea for this brief was generated from a presentation made to the Board meeting in April by members of the Environmental Management Division. Some of the shortcomings of this otherwise worthwhile program came to

light in the presentation and we drew up a brief which everyone has.

I'll finish my report by saying that the second brief is on the possible aluminum smelter in Manitoba. This came to light from an article in a rural newspaper before the more recent news of this possible smelter. We felt at the time that there should be an intensive environmental review of this smelter so that the second brief is on this subject.

This concludes my report and if accepted we can move on to consideration of these briefs.

* * *

Combined presentation at Dec. 1, 1980 and May 8, 1981 meetings.

BRIEF RE: E.M.D. HAZARDOUS CHEMICAL PROGRAM

Recommendation

The Manitoba Environmental Council recommends to the Minister that programs of the Environmental Management Division for small scale disposal of hazardous chemicals from Manitoba schools, hospitals, laboratories and municipalities to be improved by means such as the following:

1. Assign suitable vehicles to transport hazardous chemicals to disposal or storage sites;
2. Arrange additional personnel so as to increase the scope of both disposal operations and seminars on safety;
3. Arrange for use of, perhaps jointly with industry and municipalities, incinerators for effective combustion of waste solvents or other effective disposal methods so that the current practice of detonation of these materials can be terminated.

Background

The 1980 Annual Report of the Environmental Management Division (1) noted that the Division had participated actively in identifying hazardous wastes generated in Manitoba. Studies (2) have shown that industrial activities in Manitoba generate an estimated 42,000 tonnes of "hazardous" waste annually. Not specifically included in this category are small quantities of waste or unused chemicals, e.g. sodium metal, cyanide salts and volatile solvents held in small quantities by various institutions throughout the province that must periodically be disposed of. These chemicals can be a safety and health hazard especially if stored in inadequate facilities for long periods. The Division has for the past 10 years been disposing of small quantities of these chemicals in rural areas by transporting them in standard governmental vehicles to the nearest landfill site for burning or placing toxic solids, e.g. pesticides, in the Division's storage tank at Gimli. A similar service is performed in Winnipeg except that the volumes of chemical are somewhat larger and elaborate precautions, such as the use of the City of Winnipeg bomb disposal truck, are made. Solvents are generally disposed of by detonation at the Brady landfill site about two miles West of St. Norbert.

The Environmental Management Division is providing a valuable and necessary service free of charge for this work. However, several of its procedures are hazardous and cause unnecessary risk to Divisional personnel, the public and the environment. We recommend that:

(1) The Division be equipped with vehicles designed to carry hazardous chemicals. This would avoid possible accidents during transport of unstable chemicals, e.g. peroxides, and might make possible the transport of some chemicals to a central collection site.

(2) The practice of detonation of solvents should be stopped. Typically, solvent bottles are wrapped with detonation cord and exploded. This results in a large fire in which the majority of the solvent is consumed and some of the partially burned material is dispersed. A much more satisfactory procedure for many solvents would be controlled introduction into a burner to allow complete combustion. Several industries in Eastern Canada offer this service at present. The quantities of solvent involved are small and would not likely be of interest to a commercial facility for disposal of hazardous chemicals. Large quantities of solvents and waste oils could be handled by a regional disposal facility.

(3) the Environmental Management Division increase the scope of its hazardous chemical activities by inspecting storage facilities in school and hospital laboratories, distributing information on safe handling of hazardous or toxic chemicals and publicizing its activities. Currently, we understand that this inspection service is carried out on a request basis only. Apparently only about 80 schools have been serviced in the past but there are approximately 250 secondary schools in Manitoba.

References

1. Environmental Management Division, Manitoba Department of Consumer and Corporate Affairs and Environment, 1981.
   Annual Report of the Environmental Management Division year ending March 31, 1980. 22 p.
2. Reid, Crowther & Partners Limited, 1980.
   Hazardous Wastes in Northern & Western Canada: The Need for a Waste Management Strategy. Vol. 1. Assessment of Need.

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Approved May 8, 1981.

Chemical Accidents by Product in Manitoba (1980)*

Product	Incidents
Fertilizer	12
Pesticides/Herbicides	7
Anhydrous Ammonia	3
Ammonia Refrigerant	2
Chlorine	1
Sulfur	1
Transformer Oil	4
Radioactive Waste	1
Flammable Gas	5
Flammable Liquid	1
Corrosive Liquid	2
Salt Solution	1
Hazardous Waste	1
Miscellaneous Oils	1
Poison	2
Total	44

* Dept. of Consumer & Corporate Affairs and Environment, Environmental Control Services, Waste Management Division, 1980 Environmental Accident Report.

ALCAN's Grande Baie aluminum smelter (Oct, '80)

Courtesy Winnipeg Sun

BRIEF RE: ALUMINUM REDUCTION PLANT

Recommendation

The Manitoba Environmental Council recommends to the Minister that he conduct an intensive review, including public hearings, to investigate the potential environmental hazard problems associated with aluminum reduction* plants and the technological safeguards needed to minimize these problems and that this review be conducted before any site is chosen or contract is made between the Government of Manitoba or their agents and any company wishing to construct such a facility.

Background

The Stonewall Argus reported (February 4, 1981) that the Town of Teulon was being seriously considered as the site for the proposed aluminum smelter referred to in recent announcements by Cabinet ministers in the Manitoba Government. The Argus article emphasized the benefits to the rural area, particularly the employment that would be generated. A text of the article is attached (Appendix 1). The article does not report on the many problems associated with fluoride emissions from aluminum reduction plants in other parts of Canada and around the world. Chronic exposure to extremely low concentrations of fluroides has caused severe health problems to plant workers, to people living nearby and to plants, livestock and wildlife in the areas surrounding the smelters. The status of fluoride in the environment (up to mid 1977) is summarized in the report "Environmental Fluoride, 1977", by D. Rose and J. R. Marier, National Research Council of Canada, N.R.C. 16081. The considerations from their "overview and recommended research" (Appendix 2) should be seriously examined by the proposed enquiry.

App. 1 — Alcan Data Encouraging

Alcan vice-president Creighton Cross told the Winnipeg Rotary Club, January 28, that preliminary information gathered by the company for its possible Manitoba aluminum smelter is "encouraging."

The Alcan vice-president's comments are of interest to Rockwood, Stonewall and Teulon because the three have joined efforts to attract industry to the area and the Alcan facility would provide direct employment for 700 people and indirect employment for at least another 1,000.

Furthermore during the projected five year construction phase of the plant, which would cost more than $500 million, as many local contractors as possible would be hired. The cost of fencing the site alone would be approximately $1½ million, Cross told Rotary Club members.

However, he emphasized that Alcan has not yet made a definite decision to build in Manitoba. "First we must digest the information gathered during the pre-feasibility study. On the basis of that information we will decide whether or not to proceed with a full feasibility study. Only when this second step is finalized will be made the decision to build. That is a good year or more away yet."

The major issues concerning Alcan, according to Cross are a satisfactory power supply and transport arrangements. Although all information from the pre-feasibility study has not been fully analyzed, Cross said he is optimistic that the preliminary data will encourage

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* technically, the correct terminology is alumina reduction plant, i.e., **not** aluminum smelter. However, the latter term is now in such common usage that we have not altered the text here or elsewhere. -ed.

the company to proceed with the next phase in late spring or early summer.

The cost of the feasibility study will range between $10 million and $12 million, and study could last two years, he said.

If the plant does get the go-ahead in Manitoba, it will be the only plant so far inland in Alcan's 80 year history.

Preliminary research data indicates that transportation costs affecting a Manitoba location could be balanced by a suitable long-term supply of economic and secure power said the Alcan vice-president.

Northern Manitoba has been ruled out as a possible plant site because of the additional costs of operating a heavy industrial plant in the north but no specific site has been selected, Cross reiterated.

"Ideally we will find a site that is not prime agricultural land. We are optimistic that within commuting distance of Winnipeg we will find a location that fulfills our transportation, hydro-electric and foundation needs without turning highly productive farmland into an industrial complex."

The actual site size required for the smelter complex is approximately 200 acres but in addition to that the company requires a monitoring zone of approximately 2,000 acres, Cross explained.

"Although we will want to purchase the land, we will be willing to consider leasing back all but the actual plant site to the original owners," he added.

Other considerations that will affect Alcan's decision are projected demand for aluminum and the reaction of Manitobans to having an Alcan plant in the province.

"We must be wanted both by the majority of people in the province — and the community in which we live," said Cross.

App. 2 — . . . Recommended Research

1. Despite improvements in, and more extensive use of, emission control equipment, large quantities of fluoride continue to be discharged into the atmosphere from industrial sources. In 1972, at least 14,236 metric tons of fluoride (calculated as fluorine) were discharged into the air in Canada, and some 150,000 metric tons were discharged in all of North America.

2. Large quantities of fluoride are also discharged into streams, rivers, lakes and oceans, as a component of industrial wastewaters. It appears probable that the amounts thus discharged are several-fold larger than the amounts discharged into the atmosphere. Many systems utilized for airborne emission-control contribute extensively to the amount of fluoride discharged in wastewaters.

3. Much of the fluoride discharged into the atmosphere arises from "point sources" such as smelters. Dispersion of the pollutant in the surrounding area is not uniform; therefore, the siting of monitoring devices, and the selection of sites for sampling of vegetation, must consider:

a) Stratification of the pollutant, with the higher levels of atmospheric fluoride found at the greater heights. This has significance to ecological damage to vegetation on exposed hilltops or mountainsides, even at considerable distances from the emitting source;

b) The "shielding" effects of vegetation and other obstacles, which results in lower fluoride exposure (and uptake by) vegetation growing on the downwind side of such obstacles.

4. The ecological impact of airborne fluoride emissions is known to be serious with regard to coniferous forests and to epiphytes and bryophytes. However, lichens and mosses are less susceptible to fluoride injury than coniferous trees. Relatively little is known about the effects

of fluoride on aquatic life, even though large amounts of fluoride are known to be released into some waterways. More attention should be paid to fluoride effects on pollinating insects and on plankton.

5. Airborne fluoride has had a serious impact on agricultural and silvicultural species. With airborne gaseous fluoride, there is no evidence for a no-effect threshold level below which no reduction in crop yields occurs, especially over the long term. For exposure of Canadian forest species, the average (30-day) airborne gaseous fluoride concentration should not exceed 0.2 $\mu g/m^3$. There is an urgent need for long-term Cause/Effect studies of species known to be sensitive to fluoride injury.

6. There have been episodes where the impact of fluoride pollution on livestock and on wild ungulates has been severe. To date, regulations limiting the fluoride content of fodders have provided neither adequate protection against economic loss to the farmer nor adequate control of airborne fluoride. For young growing swine, an 18-week exposure to dietary fluoride (whether in forages, feeds, or mineral supplements) can be expected to decrease daily weight-gain by about 4% for each 100 ppm increment of dietary fluoride. The need for further data on which Cause/Effect equations can be based is apparent. Loss of weight-gain may be a suitable measure of sub-clinical (pre-skeletal) intoxication.

7. There is clear evidence that wildlife species are more vulnerable to fluoride toxicosis than are livestock species. The impact seems to be most severe on predator species, because they must capture their prey and because they are more susceptible to the bioaccumulation of fluoride through their food chain. Cause/Effect studies of these species should include consideration of the multiple stresses imposed by the ecosystem (e.g. malnutrition).

8. Researchers in various regions of the world have reported that human hydrofluorosis is less severe when the waterborne fluoride is ingested from hard waters, than from soft waters. There is evidence that chronic intake of fluoride increases the long-term metabolic requirement for both calcium and magnesium. Other studies have indicated that fluoride may increase the metabolic requirement for vitamin C and manganese. The Cause/Effect aspects of these dietary/nutritional factors require urgent attention, with regard to chronic intake of fluoride. There is no doubt that inadequate nutrition increases the severity of fluoride toxicosis.

9. Fluoride has displayed mutagenic activity in studies of vegetation, insects, and mammalian oocytes. There is a high correlation between carcinogenicity and mutagenicity of pollutants, and fluoride has been one of the major pollutants in several situations where a high incidence of respiratory cancer has been observed. For these reasons, the relation between airborne fluoride and incidence of lung cancer needs to be investigated.

10. Long-term ingestion, with accumulation of fluoride in animals and man, induces metabolic and biochemical changes, the significance of which has not yet been fully assessed. It cannot be assumed that such changes are of no significance to human health. There is evidence that neurological complaints are related to the early histological changes that precede overt skeletal fluorosis. There is also evidence that the early bone changes can reflect an entire gamut of abnormalities, depending on factors such as nutritional and metabolic status. Further studies on the early subtle changes of fluoride toxicosis in humans, in terms of both diagnostic aids and Cause/Effect interrelations, chould have a high priority.

11. Fluoride is a persistent bioaccumulator, and is entering into

human food-and-beverage chains in increasing amounts. Careful consideration of all available data indicates that the amount of fluoride ingested daily in foods and beverages by adult humans living in fluoridated communities currently ranges between 3.5 and 5.5 mg. For a 70 kg human adult, this range is close to the 0.03 to 0.07 mg/kg/day estimated for "an acceptable daily intake". In addition to the food-chain, dentifrices and pharmaceuticals can contribute significantly to the fluoride intake of some individuals.

12. Inhalation of airborne fluoride may contribute several milligrams to the total daily intake of industrial workers, and may be significant for persons residing near sources of fluoride emissions. However, the effect of airborne fluoride on human respiratory tissue is not necessarily related to total body-burden, but may relate to the direct impact of fluoride on respiratory tissues. The contribution of cigarette-smoking to fluoride intake also requires study.

13. In the assessment of the impact of fluoride on animals and man, more attention should be focussed on the concentration of inorganic fluoride in blood plasma. Available evidence indicates that accurate assessment of the plasma F concentration can provide valuable information about the body-burden during chronic fluoride intake.

14. In addition to industrial workers, there are several sub-groups of the population who may be more affected by environmental fluoride than the population at large. There are persons who:

a) Have a sub-optimal nutritional status, especially with regard to calcium, magnesium, vitamin C, manganese, or a low dietary Ca/P ratio (Note: This also applies to animals);

b) Live in the proximity of fluoride-emitting industries;

c) Live in regions where goitre is endemic, because there is suggestive evidence that fluoride may increase the incidence of goitre in such regions;

d) Have kidney impairments, particularly those with bilateral pyelonephritis or nephropathic Diabetes Insipidus;

e) Have the excessive-thirst polydipsia associated with diabetes, because they consume large quantities of fluids.

These may be called "critical groups" (ICRP 1977) either because they accumulate more fluoride or suffer toxic effects more readily.

15. Standards limiting emissions or environmental concentrations of fluoride should be based on criteria which include those derived from studies of these "critical groups".

16. In addition to the research recommendations we have made, we would like to acknowledge those presented in a recent U.S. National Academy of Sciences report (see Fleischer *et al.* 1974):

a) Additional detailed studies are needed of the health of human and animal populations exposed to high concentrations of airborne fluorides;

b) The gross effects of fluoride on plants and animals have been studied, but much needs to be done on the basic biochemical lesions induced by fluoride, and on dietary factors affecting fluoride uptake by man;

c) The very large emission of fluorocarbons (freons), and their rapidly increasing use, require study of their distribution, rate of degradation, and possible effects on plants, animals and humans;

d) Waste waters of high fluoride content have been released from phosphate processing and from the aluminum industry, with detrimental effects to such marine organisms as oysters and crabs. Possible chronic effects from exposure of such organisms to lower levels of fluoride need study;

e) In view of the high fluoride content reported to exist in some fish-protein concentrates used as food supplements, the possible impact of this added source of fluoride in the diet should be further investigated;

f) Methods of sampling and separating gaseous and particulate forms of airborne fluoride need study and standardization;

g) Further work is needed on the relation of the uptake of fluorine by plants to its concentration in the air;

h) Study of the form of fluorine in plants is highly desirable, especially the nature of fluorine bonding in plant tissue and its solubility in aqueous solutions;

i) More data are needed on the relation of the fluoride content of groundwaters to the mineralogical and chemical composition of the source rocks.

* * *

Approved March 8, 1981.

Smelter hearings urged

By Manfred Jager

The outgoing chairman of the Manitoba Environmental Council has warned the province to guard against ecological damage which could arise from an Aluminum Company of Canada aluminum smelter in the province.

Basil Rotoff said yesterday his group recently completed a brief to the provincial government recommending "an intensive review, including public hearings" on the proposed aluminum smelter.

Rotoff, a University of Manitoba professor of city planning, said in an interview during the ninth annual meeting of the council at the university the group wants the province to investigate the potential environmental hazards and possible health problems associated with aluminum reduction plants and the technological safeguards needed to minimize these problems.

"One problem with aluminum smelters is the content of fluoride in the emissions into the air," Rotoff said. "This requires certain preventive counter-measures and Switzerland and Italy tried their hand at this without too much success.

"We must try to do better here in Manitoba. If fluorides accumulate in the environment, they also accumulate in the human body and, in fact, can become very dangerous."

Received assurances

Rotoff said he has been assured by Environment Minister Gary Filmon that environmental council concerns will receive full consideration as discussions between the provincial government and Alcan proceed.

The council's seven-page brief to the government, completed early last month and according to Rotoff given to Filmon at the time, says the poisonous impact of airborne fluoride is particularly injurious to coniferous trees and affects lichens and mosses to a lesser extent.

"Relatively little is known about the effects of fluoride on aquatic life, even though large amounts of fluoride are known to be released into some waterways."

As well, the brief says, there are well-documented incidents of fluoride pollution damage in livestock and hooved wildlife species.

Humans are particularly susceptible to health damage from airborne fluorides if they are malnourished, particularly if they lack calcium, magnesium, manganese or vitamin C, live close to fluoride-emitting industries or have kidney impairments or suffer from excessive thirst as a side effect of diabetes.

Rotoff said the council has urged government negotiators not to underestimate the air pollution dangers from an alumninum smelter, should one be built in this province.

Winnipeg Free Press, May 9, '81

ENVIRONMENTAL QUALITY — J. NICKELS

For quite some period of time there has been work going on regarding the environmental task force. Finally, we are in a position to make some comments on the results. The work probably can be examined in terms of three phases and these three phases have taken quite some length of time to accomplish.

The first phase was a definitional phase. It started in March of 1978 on the basis of a letter from the Hon. A. Brian Ransom. Certain desires on his part for the establishment of environmental quality was received by Council. Discussions took place at that point to try to meet the requests of the Minister. It was not until January of 1979 that Council finally came to the conclusion that probably one of the best approaches would be to construct a questionnaire, an environmental quality questionnaire, and to administer this questionnaire to members of Council, since Council itself represents concerned environmentalists.

The second phase of this undertaking was questionnaire construction. You may recall that a preliminary questionnaire was devised. In February of 1979 this questionnaire was sent to all members of Council, asking questions regarding the opportunities each member would most want provided by the environment. These opportunities fell in the area of land, vegetation, animal, fish and birds, and air and water concerns. The idea was to have Council members themselves bring up the items which could be used in a subsequent and final questionnaire. By April 2, 1979 41% of all Council members had returned their questionnaires. A task force subcommittee analyzed these responses. As indicated in a previous annual report [Annual Report Seven: 1979 p. 53-55], the 496 different responses were distributed across 139 categories of responses that the Council members themselves gave. On the basis of these results, a final questionnaire was constructed. This represents the beginning of the third phase, again the first phase being the definition of the problem, the second phase being the construction of the instrument and the final or third phase being data collection and analysis of the questionnaire.

In January of 1980 the final Environmental Quality questionnaire was sent to all Council members. You may recall that this particular questionnaire had some rather unique features about it. First of all, there were 99 questions covering all areas of environmental concerns. The 99 questions also were rated on the basis of money, on the basis of the amount the respondent would be willing to support various environmental issues and actions. The result of the replies to this questionnaire were a 60% return. From this 60% return of the questionnaires the results have been undergoing rather extensive analysis. The respondents, when totalled, gave a total of 4,926 ratings. For any group to have to give this much information, on behalf of the Environmental Task Force, I would like to extend our appreciation for the time they took in giving information to us so that the report today is possible.

The results of this final questionnaire tend to be organized on three different issues. One is the popularity or the frequency with which individuals think this is a concern. The second is there some way we can reduce any environmental questionnaire to less than 99 items? And third, was the cost rating approach an effective one? Now in terms of the popularity, the popularity of various environmental concerns, the least popular, those environmental issues which individual members of Council, seem to be giving very little to support it were the following: issues of snowmobiling, water skiing,

motorboating, hunting birds, hunting animals, trapping, the expansion of commercial and industrial land, the settlement of crown land, and such things as horseback riding paths in towns, snowmobile paths in towns, the expansion of the use of industrialization of water, and restricted downtown parking. These were the least of the 99, these were the least popular items. Perhaps if you wanted to draw all of these together, we could say that these might represent to members of Council, some misuse or perhaps a possible misuse of nature.

On the other hand, those environmental concerns which seem to receive a lot of support, which there seem to be a lot of interest in, were such things as: establishing environmental quality standards, the enforcement of these standards, education of the public in regard to such standards, having further research on ecology, having further research on new energy sources, having cleaner waters in rivers and lakes, having water protection from pollutants, adequate protection for endangered species, have land use regulation and garbage recycling. In addition, there was the interest in including more land for wildlife habitat and non-pollution of land. Now these might seem to be in some way having to do with the knowledge of or the action to preserve nature.

The first results of the analysis tended to very definitely divide those items which seemed to be of great importance, versus those which did not. The second major concern which led to a second analysis was 99 items seemed to be an awful lot of items if there were to be further work on environmental quality? Is there some way that we could reduce the number of items by thinking of clusters of items or what we might call a general factor which could still explain why Council rated the items as they did. In order to come up with information regarding this, a statistical procedure was undertaken called factor analysis which attempts to do just this, to reduce all 99 items to general clusters of items, or clusters of factors. Of the 99 items, 19 basic factors could account for all the ratings which were obtained from the 99 factors. Actually, if one took the top 5 factors, one still would be accounting for about 70% of all the variations in the test response. I might mention at least the five top factors give an indication as to what the environmental concerns seem to be, according to the results of the questionnaire.

The first factor included interestingly, tapped every item that was in the questionnaire, except one, that being snowmobiling in town factor, so this factor one seems to be a general factor of environmental concern. This would tend to mean that the members of the Council do in fact seem to base their ratings on concern of the external environment but some of the other factors that came up were rather different.

Factor two tended to involve concern about the management and use of the wilderness; such things as do individuals favor or disfavor intervention of humans into nature, do they favor or disfavor industrialization?

Factor three might be summarized as dealing with recreation in the wilderness and in towns. This factor would seem to involve the use of nature for one's leisure time for certain kinds of sporting outdoor activities. Some individuals seem to be very much in favor of this, some tended not to be.

The fourth factor seemed to involve unrestricted enjoyment and use of the land. This factor seemed to go a bit against hunting, fishing and trapping but there was a concern for land over wildlife. They wanted the land to be preserved.

The last factor that I want to mention, factor five, tended to deal more with the preservation of the land for appreciation

purposes. Here there would be an interest in such things as looking at nature, studying nature, no hunting, but at the same time one of the items which seemed to be low in this factor was whitewater canoeing. One of the members of the Task Force said it might be that the stereotype of the individual who engages in whitewater canoeing is that you're going so fast by having so much fun going through nature, that in fact you miss it.

Now, there were many other items that came out, such as commercialization and travel through the wilderness, but basically it does seem feasible that an environmental quality questionnaire can be constructed, can be used, can have as its rating format, cost and at the same time can contain less than the 99 items which members of council were subjected to when they were asked to complete the ratings sheet. Again, on behalf of the quality task force I want to thank you for everything that you've helped us with. The final written report will be going to the Task Force itself very shortly and then ultimately to the Board.

* * *

Presented Dec. 1, 1980 Council Meeting.

Environmental priorities raised

By Ritchie Gage

Determining environmental issue priorities may be easier for the provincial government as a result of a questionnaire devised by a task force of the Manitoba Environmental Council.

Dr. James Nickels, chairman of a four-member task force, presented a draft copy of the questionnaire yesterday at the council's annual general meeting. It lists 99 areas of possible concern — from water quality to snowmobile trails — and asks respondents to note the amount of tax dollars they'd be prepared to spend on each annually.

The questions were selected after 88 members of the council were asked to list the environmental issues they would support with tax money and those they wouldn't.

Nickels said the information was requested by former Environment Minister Brian Ransom in 1978 to devise a method of garnering public opinion on land use, air, and water quality for future policies. Ransom is now in charge of natural resources and the council reports to Environment Minister Warner Jorgenson.

The council is a group of scientists, academics and citizens who offer opinions on enviromental issues to the government.

The members were asked how much money they would commit, from nothing to $25, out of their annual family income to increase the quality of the environment.

Topping the list of 99 concerns was establishing environmental quality standards and enforcing them. These were followed by a need to increase public awareness of environment issues, particularly in schools.

Others issues supported included more money for research on new energy sources, archeological and geological studies of historical sights and beautification of the countryside.

Among the things that the council members wouldn't support were power toboggan trails, water skiing, hunting, trapping, expansion of industry on lands, horse trails in rural towns, industrial uses of natural water ways and downtown parking.

Winnipeg Free Press, Dec 2, '80

GARRISON DIVERSION — R. D. HOWARD

Today, Mr. Chairman, I would like to show the Council an audio-visual presentation, prepared by Mr. Onno Kremers and Colin Holbrow for the Four Nations Confederacy. It is narrated by Dave Downing, from CKND and deals with the Garrison Diversion Project. At an appropriate place, I will provide a succinct update of Garrison activities. This, then, will provide a comprehensive report on the Diversion.

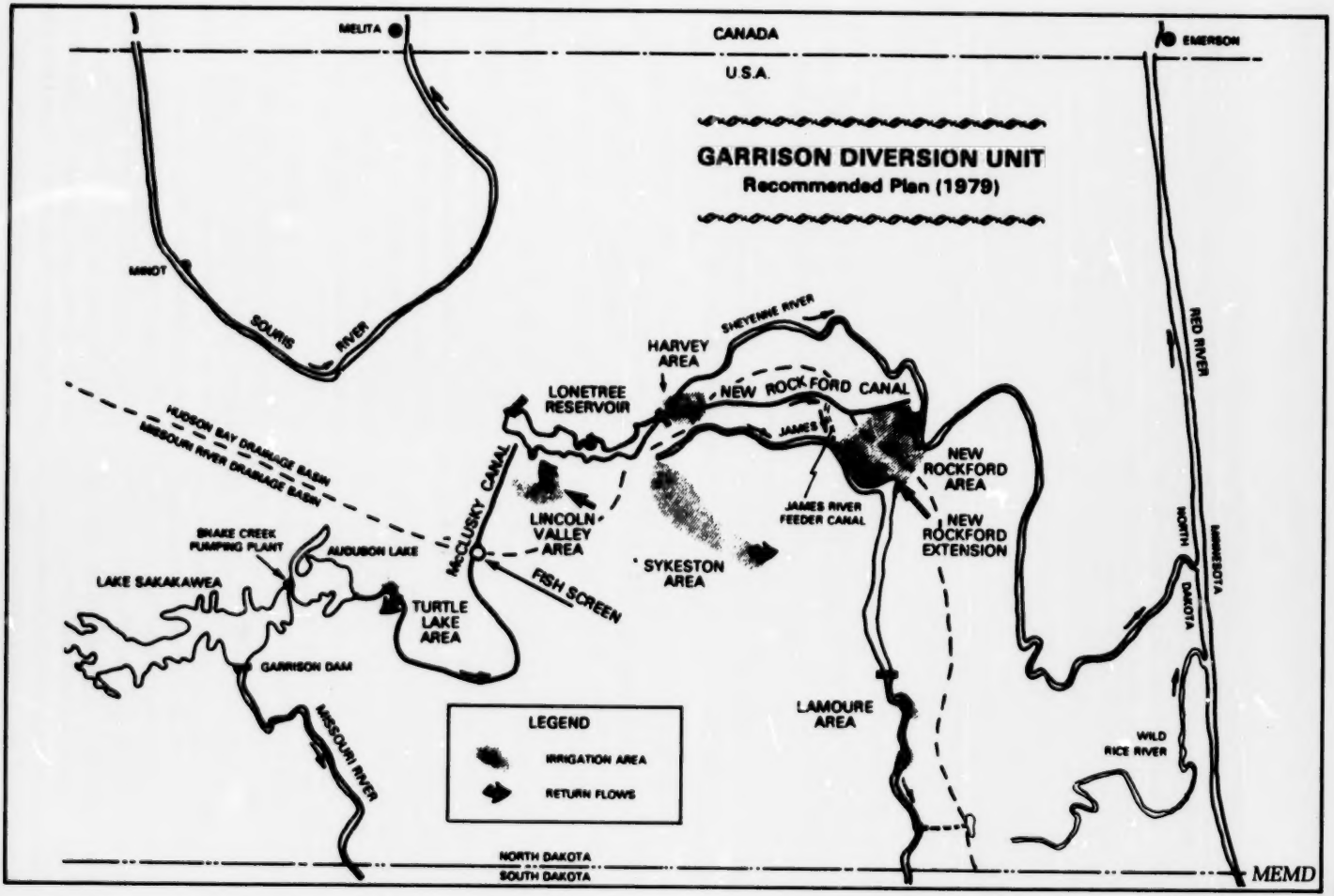
[Audio-visual presentation]

Mr. Chairman, at this time, I interrupt and if allowed subsequent to the balance of my presentation, I will show the rest of the audio-visual. In 1975 the National Audubon Society took legal action against the U.S. Secretary of State for the Interior, Cecil Andrews. The State of North Dakota and Garrison Diversion Conservancy District joined the action as intervener defendants. There was an out-of-court agreement entered into shortly thereafter, which Judge Ritchie of the Washington, D.C. district court sanctioned requiring alternative project proposals to be considered and submitted for legislative approval. The latter step was never taken. Since November 1979 the project has been proceeding over court hurdles, diplomatic notes of protest, act of law being by both Americans and Canadians against the project and simultaneously participation in legal action by Amicus Curi, (friends of the court) by six individuals representing Manitoba's concern for the private sector as follows: Ray Sigurdson, President of the Interlake Development Corporation Inc.; Thomas Ashley Johnston, Vice-President Tourism & Convention Association of Manitoba; Lawrence Samuel Ignoris, M.D., Reeve of the R.M. of Victoria Beach; Lawrence Whitehead, President of Manitoba Indian Brotherhead; Richard Donald Howard, Chairman Action Committee against Garrison.

During the year, Messrs. Holbrow, St. Hilaire, Howard and Keleher met with the C.D. Howe Institute representative, with some reluctance I might add, in respect to the boundary implications of the Garrison project. I think you're all familiar with what happened to C.D. Howe two years later, it doesn't matter anyway.

The crises faced over the past year are epitomized by the Sinton House Sub-committee hearings being called two weeks or more earlier than expected. Onno Kremers came to our rescue since he was going to be in New York the day before and was able to rearrange his itinerary to accommodate our urgent plea for help. The presentations were attentively heard by both House and Senate Subcommittees, and from independent reports received, Mr. Kremers, as usual, did an excellent job in his submission.

The next step was the decision which we had been awaiting since September 5, 1980. Judge Ritchie's decision stated that the defendant had broken the agreement entered into with the plaintiff and that the injunction requested would now apply.


CANADA
U.S.A.
MELITA
EMERSON
GARRISON DIVERSION UNIT
Recommended Plan (1979)
MINOT
SOURIS RIVER
CHEYENNE RIVER
HARVEY AREA
LONETREE RESERVOIR
NEW ROCKFORD CANAL
JAMES
RED RIVER
HUDSON BAY DRAINAGE BASIN
MISSOURI RIVER DRAINAGE BASIN
McCLUSKY CANAL
LINCOLN VALLEY AREA
SYKESTON AREA
JAMES RIVER FEEDER CANAL
NEW ROCKFORD AREA
NEW ROCKFORD EXTENSION
NORTH DAKOTA
MINNESOTA
SNAKE CREEK PUMPING PLANT
AUDUBON LAKE
LAKE SAKAKAWEA
TURTLE LAKE AREA
FISH SCREEN
GARRISON DAM
MISSOURI RIVER
LEGEND
IRRIGATION AREA
RETURN FLOWS
LAMOURE AREA
WILD RICE RIVER
NORTH DAKOTA
SOUTH DAKOTA
MEMD

The project and its supporters are now between a rock and a hard place, with no phones available to do anything except either file an appeal or go to new legislation of reauthorization on a plan which would not cross the Continental Divide. The Washington Group expects to have this ready in a couple of months and this is a submission made by those people in Washington to the Environment Canada, External Affairs, and our Natural Resource people. That is not the position taken by North Dakota. I am sure that you too are concerned about the members of the Garrison staff. As members of power and water resource service of the Dept. of Interior, they still have jobs, hopefully; not ones which have any adverse impact on Canada.

The issue now is only apparently under control. However, this is exactly the time when our senses are sharpest and we must bear down with all the effort and energy by increasing the pressure on every sector of the influence we can bring. Thank you very much Mr. Chairman, there is approximately 5 more minutes of the audio-visual.

* * *

Presented at May 8, 1981 Council Meeting.

McClusky Canal fish screen — construction phase (1976). For scale, note cylinder in right foreground; for location, see map, p. 38. *A. J. Derksen/MDNR*

WILDLIFE — J. B. NICKELS

The Committee, either by individual member or group had several undertakings prior to this Council meeting of December 1, 1980. They have been in relation to tourism in the Province or the Wildlife Act.

The Manitoba Department of Economic Development and Tourism had W. L. Wardrop and Associates et al. develop the Manitoba Tourism Development Plan. Meetings were arranged throughout Manitoba to receive public and other submissions. In a letter dated May 22 to R. R. Foster, Study Director, I made a formal submission indicating that it was on behalf of the Wildlife Committee. The text of the letter is as follows:

At the Annual Meeting of the Manitoba Environmental Council held May 2, 1980, J. B. Nickels, Chairman of the Wildlife Committee, reported that the Committee had been invited (and was prepared) to make a submission to the May 23rd forum on the Manitoba Tourism Development Plan. The formal submission is based on our conviction that any consideration of ways by which tourism can be improved in the Province MUST take into account a number of factors, two of the most important ones being wildlife and wildlife habitat. Problems in tourism development should not be solved at the expense of the flora and fauna of our Province but should be analyzed with these factors clearly in mind. Therefore, we submit that tourism development should be examined and carried out under the terms of the Wildlife Philosophy adopted by the Manitoba Environment Council on May 14, 1976. (Appended is a copy of the Wildlife Philosophy originally published in Annual Report Four, Manitoba Environmental Council, 1976.) Please accept the above statement and the appended Wildlife Philosophy as the submission of the Wildlife Committee.

Mr. Bennett attended the Winnipeg meeting on May 23 and repeated the Committee presentation. On October 2, the Minister of Economic Development and Tourism, the Honourable J. Frank Johnston acknowledged our input and provided a 7-page summary of the presentation made at the Winnipeg meeting. Our brief was reported as given. I can thus assure the Council that our views were received. Whether or not it will have any effect remains to be seen.

The other activity has been with the Wildlife Act. We received a copy of the new Act from the Minister, Hon. Brian Ransom and I, on behalf of the Committee, made a presentation to the Law Amendments Committee of the Legislature on Saturday, July 26th. The only other representation made was by the Manitoba Cattle Producers Association. The proceedings were published. Our submission was recorded as follows:

MR. JIM NICKELS: *Mr. Chairperson, committee members. My name is Jim Nickels. I'm chairperson of the Wildlife Committee of the Manitoba*

Environmental Council with the assistance of Mr. Keleher, who is the executive secretary of the council. I would like to make a presentation which represents the views of the Wildlife Committee, if I may.

First of all, I'd like to mention that the Manitoba Environment Council is the citizens' advisory group to the Honourable Mr. Jorgenson and, at this particular point, I would like to give a notice of appreciation that the Honourable Mr. Ransom sent us a copy of The Wildlife Act so we could comment on it.

Our view is that it represents innumerable improvements over two previous documents, The Predator Control Act and the previous Wildlife Act. Particularly I would say in terms of increasing the restrictions on importing and exporting of wildlife and in such aspects as allowing for the statement of an endangered species, we find this to be extremely helpful. Also in terms of Section 83(1) and (2) the regular reports by the Minister seem to be very favourably evaluated by the members of the Wildlife Committee.

However, there are two reports that are indicated in the Act as proposed. One is the annual administrative report and the other is a five-year report. Our committee would like to make a recommendation that since the annual report on the activities of the Ministry regarding wildlife for the year has only to do with the implementation of the Act, such things as perhaps the number of licences issued and things of this sort; and only every five years there would be any attempt to give a review and forecast of wildlife activities. It is the recommendation of the Wildlife Committee that either the annual report be more inclusive or that the five-year period be reduced.

This does not imply that each year a complete and extensive report would have to be given but at least that other issues besides the implementation of the Act could be mentioned. Such things as the status of wildlife, the review of ongoing programs and the forecast of future activities. For every year there to be a comprehensive report, we admit would be too much but we think that there would be an advantage to providing for a greater number of topics to be dealt with more periodically than every five years. This is one of the recommendations that the Wildlife Committee has.

Mr. Chairperson, would you prefer that I indicate all of the recommendations we'd like to give, first?

MR. CHAIRMAN: Surely.

MR. NICKELS: All right. We also very much favour the combination of The Predator Control Act and The Wildlife Act. This is a great advantage. The one issue that this raises, however, is that although there may be an advantage in discriminating for certain species, for example, endangered species, protected species, there is the possibility of a continuing discrimination against certain species. I refer particularly to various sections, such as Section 18 regarding remuneration for taking various wildlife forms; Section 32 and Section 46(1). All of these, particularly in terms of big game, mention both the black bear and the wolf.

It would be the recommendation of the Wildlife Committee that since there is adequate protection in other sections of the Act, particularly Section 64-1, that there is no need to continue the stipulation of the wolf as being taken for remunerative purposes. The wolf is being persecuted in so many areas, is becoming endangered and at the same time to add to that the possible remunerative aspect, the Wildlife Committee would like to recommend that in those three sections the word "wolf" be omitted.

Finally, there is in Section 14(1) and 37(1) the very favourably evaluated reaction regarding the cancellation of a licence or permit if an individual is

convicted of an offence under the Act. These, however, these sections again perhaps may show some form of discrimination in that the fur bearing animals listed in Division 2 have no such recourse, as far as the elimination of permits and licences if someone is found practising trapping or hunting of them illegally. The Wildlife Committee has asked that I also recommend that whenever a licence or permit be revoked because of conviction of an offence that this be across-the-board to all wildlife forms, not just to certain forms and not to others.

One other comment I might make is that as far as specifying particular species is concerned the entire amphibian and reptile group appear to be sort of fair game, if you will; and the small game group, the small game animals, Division 4, as listed in the Act, as indicated there are no instances under the title, Small Game Animals. The Wildlife Committee, since it just received the report, was unable to find out whether this meant that there were some that would be protected, some that would not be protected. But if the small game group, if the implication was there were so many that they wouldn't all be listed, then we would assume that they would all have protection of either licenced hunting or not. If, on the other hand, there was some other reason for not indicating what species were under the licenced hunting for small game animals, then the Wildlife Committee would recommend that this be completed and that the licencing of hunters be appropriate for small game animals too.

MR. CHAIRMAN: Thank you very much Mr. Nickels. Any questions of the Committee? Mr. Adam.

MR. ADAM: I'll try again, Mr. Chairman, in the event that a licence suspension occurred in, say, waterfowl, are you suggesting that a trapper would also lose his trapping privileges? Is that what you're indicating?

MR. NICKELS: Yes, the recommendation is there be no discrimination as to which species the infraction occurred with.

MR. ADAM: Thank you.

MR. CHAIMAN: Mr. Jenkins.

MR. JENKINS: Thank you, Mr. Chairman, through you to Mr. Nickels, dealing with your recommendations on 83(1) and 83(2), I just want a bit of clarification, in other words, what you're recommending to the committee is that the Minister in his annual report make a more comprehensive report dealing with species of wildlife than he would only do under 83(2) which would be a five-year report, is that the basis of your recommendation?

MR. NICKELS: Yes, in other words that it be more comprehensive, not that it necessarily be any longer but at least that it be more comprehensive and cover more than just the immediate implementation of the Act. Now there were two ways that we recommended it could go. It could either be included as an expansion of topics dealt with each year, in the annual report, or it could mean that there be a reduction in this five-year period to deal with the entire issue. But the feeling was that five years is too long to deal with the comprehensive view of wildlife, wildlife management and Manitoba's resources.

MR. JENKINS: Yes, then through you to Mr. Nickels, Mr. Chairman, what would your recommendation be on 83(2) then, would it be every three years or something like that?

MR. NICKELS: Yes, no more than three years. The consensus among the Wildlife Committee was two to three years.

MR. JENKINS: Fine, thank you.

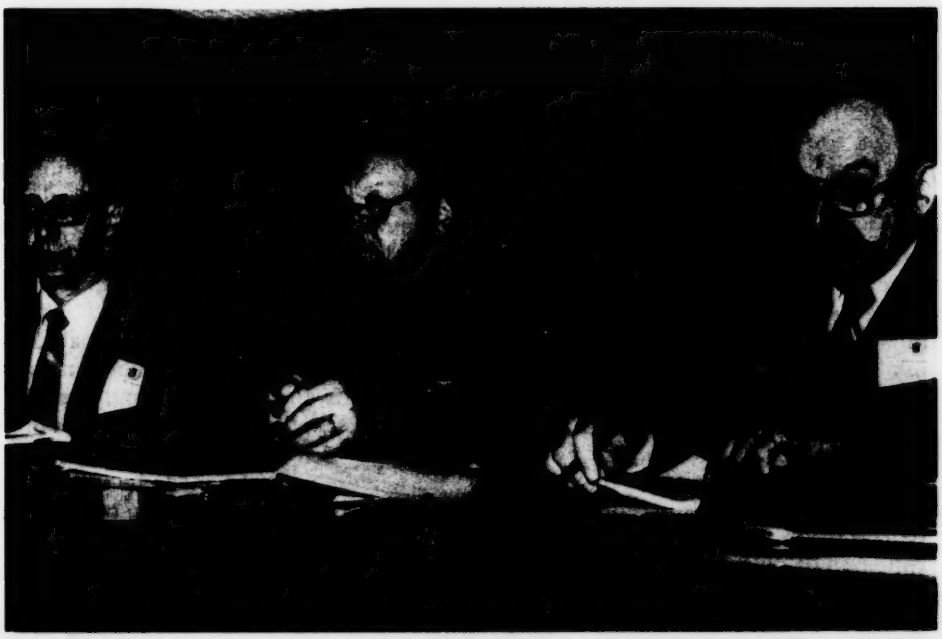
MR. CHAIRMAN: Thank you very much, and thank you for your presentation Mr. Nickels . . .

Herewith is the Wildlife Committee's report to the Council's May, 1981

meeting. The Committee has investigated and discussed numerous issues relating to Manitoba wildlife and wildlife habitat. One concern has been fire prevention in wilderness area. One of the Committee members has suggested a plan for the improvement of fire prevention measures throughout Manitoba. A second issue, related to the first, is the Committee's consideration of the feasibility of reseeding and/or replanting in areas already affected by forest fires, e.g. Wallace Lake. At present, the Committee is exploring the advantage of seeding deciduous trees and shrubs by air rather than merely replacing "burned out" vegetation or planting Jack Pine, *Pinus banksiana*, as desired by pulp companies. Benefits of the proposed seeding plan would improve wildlife habitat as well as extend the variety of plant forms.

Another issue examined by the Committee is the problem of damage to wildlife and wildlife habitat associated with coal burning, acid rain, aluminum production, etc. in the Province. Manitoba lakes are especially vulnerable to such pollution. The Committee would like to share information on these problems with the Water and Waste Committee of Council.

An issue which has received considerable newspaper publicity is the alleged mass depletion or barren-ground caribou, *Rangifer arcticus*, herds due to native hunting in the North. After investigating the problem in Manitoba, the conclusion was that too few of the herds enter the Province to represent a major concern. However, if the decline of the barren-ground caribou continues in the North, the situation will be dangerous. A related issue in Manitoba is the need for the Province to label certain species with the title "Endangered". The recently adopted Manitoba Wildlife Act (Chapter W140) introduced this term and protection of species covered by this term,

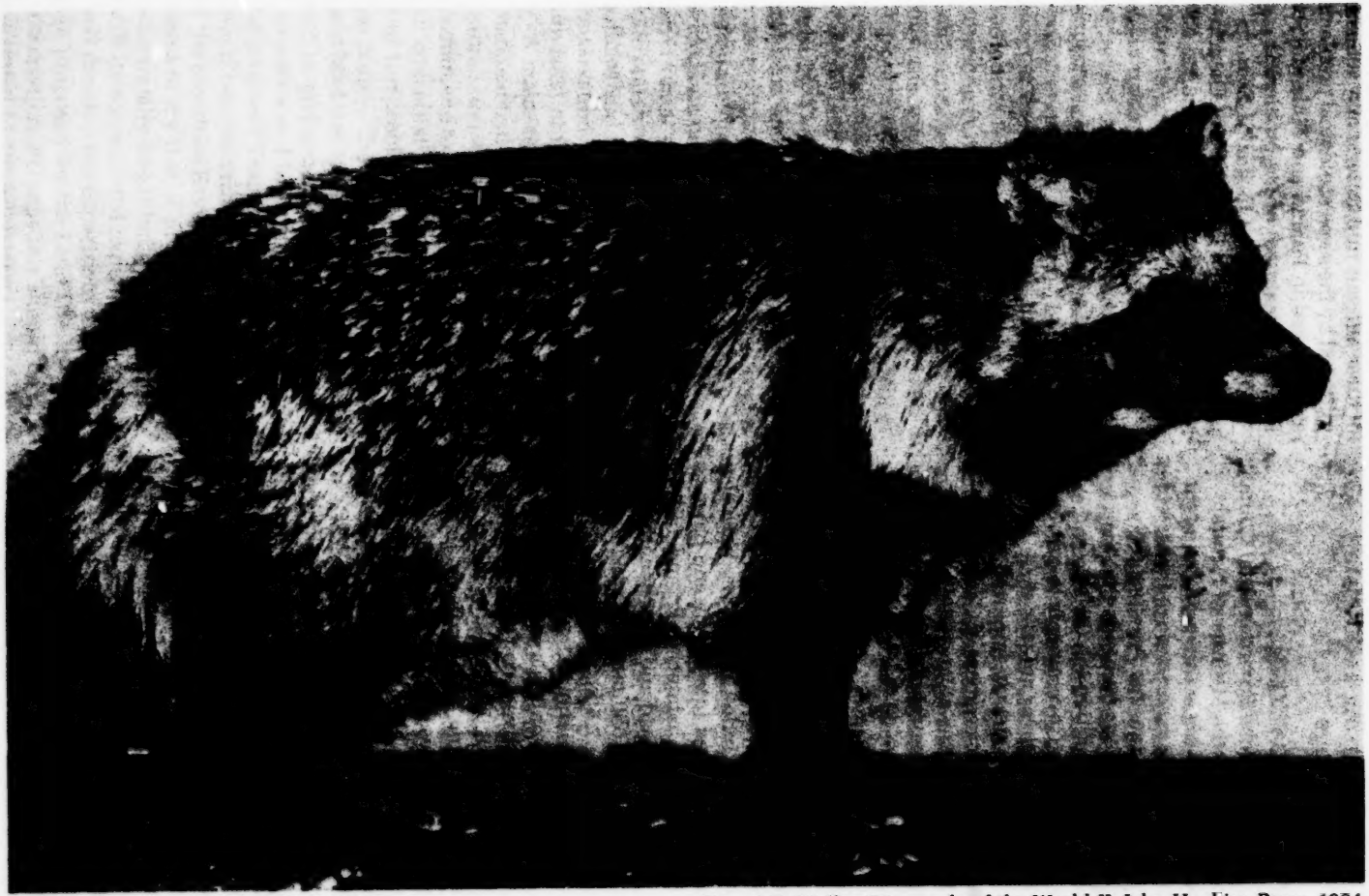


Some Wildlife Committee members at Dec. 8, '81 Council meeting — J. B. Nickels (left); W. O. Pruitt, Jr. and J. F. Palamarchuk. *D. Landy/MGIS*

but to-date no species has been included in this classification. The Committee has initiated efforts designed to investigate a potentially serious problem in Manitoba involving depletion of the Woodland Caribou, *R. caribou*. With extended roads and lumbering activities throughout certain areas of the Province, the Woodland caribou may be the first species to require protection through inclusion under the "endangered species" classification. The Wildlife Committee will explore in the near future which other species should be included as "endangered".

The most recent event of importance to the Committee related to the unveiling by the Parks Branch of the Whiteshell Master Plan before an audience of over 300 interested persons on April 28, 1981 at the Winnipeg Art Gallery. Since the Committee has previously provided input to the Parks Branch on a preliminary Whiteshell plan, the Chairman of the Wildlife Committee attended the meeting to find out the results of the preliminary survey as it has affected the finalization of the Whiteshell development plan. Of great significance to the Committee is the decision as of May 1, 1981 to reduce the percentage of wilderness from the originally proposed 20% to 11%. In addition, intensive commercial development is planned for Eaglenest Lake. The entire plan sets aside specific zones for specific uses with the Mantario region allocated to backcountry, non-motorized and non-commercial uses. The plan specifically protects and preserves sites of natural and human history. Wildlife protection sites (such as Alf Hole) are identified in the plan, as well as regions which do or do not permit hunting, fishing, trapping, lumbering, wild rice harvesting, mining and snowmobiling. An extension of nature trails and roads to the wilderness are also included in the plan.

Finally, the Committee has become concerned about the possible introduction of raccoon dogs, *Nyctereutes procyonoides*, from Finland and other northern countries to Manitoba. Such a concern was in part prompted by the importing of raccoon dogs into Ontario for fur raising. Since species raised in fur farms sooner or later escape to the wild, the presence of the highly predacious raccoon dog into Manitoba could be expected to be a harmful influence on wildlife species and an ecological balance. Therefore, a brief was prepared by the Wildlife Committee to be presented to the Council Meeting for approval. However, after the brief had been placed on the agenda of the meeting, the Committee Chairman received information indicating that the Minister of Natural Resources, Brian Ransom, had recently announced that the importation, release and possession of raccoon dogs would be prohibited under Section 48(1) of the Manitoba Wildlife Act. The rationale for this action closely resembles the Committee's own rationale for exclusion of the animal, namely that a wild population of these animals could have a severe impact on wildlife and agriculture in Manitoba. However, since the introduction of raccoon dogs into Manitoba could come from our neighbouring provinces, the Committee prefers not to withdraw its entire recommendation but only (a) the portion about Manitoba Government not permitting raccoon dogs being imported into the Province. The Wildlife Committee proposes that the remaining recommendations be acted upon, namely (b) that the neighbouring Provinces be contacted regarding the seriousness of their importing the animals and (c) that the Government of Canada be contacted about the passage of a law to control the import of exotic wildlife. The Wildlife Committee would also like Council to congratulate the Minister of Natural Resources for his action in preventing the importation of raccoon dogs into Manitoba.



Raccoon Dog, Nyctereutes procyonoides. *Ernest P. Walker/Mammals of the World II, John Hopkins Press, 1964.*

Brief: Importing and Raising Raccoon Dogs

RECOMMENDATIONS:

The Manitoba Environmental Council congratulates the Minister of Natural Resources for his action prohibiting the importation of raccoon dogs *(Nyctereutes proconoides)* into the Province of Manitoba and recommends that the Minister (a) petition the Ontario and Saskatchewan Governments to prevent the import of these animals there and to eliminate any already imported and (b) request the Government of Canada to pass the law (pending since 1968) which controls the import of exotic wildlife into Canada.

BACKGROUND:

The raccoon dog *(Nyctereurtes procyonoides)* comes from eastern Siberia, Manchuria, Japan, parts of China, and northern Indo-China. They have also been introduced into Russia and have extended their habitats to Poland and Finland. The head and body length is approximately 550 mm and weight approximately 7.5 kg. They resemble raccoons in facial markings but foxes otherwise. The animals are generally nocturnal and live either singly or in groups of 5 or 6. Their diet is extremely varied, including small animals, fish, fruit, and berries. They have typical litters of 6 to 8 pups. The skins of raccoon dogs have been used in the fur trade, their bodies for meat, and their bones for oriental medicines.

The spread of raccoon dogs into Eastern Europe has been followed by various problems, such as crop damage, spread of rabies, predation on animal species (against which there are often no natural checks), and the eventual displacement of native wildlife species. Recently 135 raccoon dogs were imported into Ontario from Finland for fur raising. Since species raised in fur farms sooner or later escape to the wild, the introduction of these animals into Ontario may soon be followed by the same ecological problems experienced in Poland and Finland. (See R. Reid's treatment of the problem in "Earthwatch" in the magazine *Seasons* published by the Federation of Ontario Naturalists, Winter, 1980, page 6.)

* * *

Approved May 8, 1981.

Revised presentation for Dec., 80 and May, 81 meeting.

LAND USE CONFERENCE — J. SELWOOD

The concern of the conference was to promote comprehensive land use planning in Manitoba. Invited speakers addressed this subject, outlining perceived problems and advocating conservation of rural land. The recently adopted Provincial Land Use Policy Guidelines were outlined. A series of workshops allowed participants in the Conference to establish their principal concerns and propose solutions.

Concern was expressed at the extent of poor land stewardship and the intrusion of urban land uses into agricultural districts. The reasons identified for these problems included: ignorance of good conservation practices, lack of concern for the future, foreign ownership and inadequate or poor government policies. Government was accused of promoting poor practices through land taxation policies and urged to do more to support conservation through regulation, provision of incentives, and education.

A major recommendation was for the establishment of a Provincial Land Use Commission whose functions would be to recommend to and advise the government on: education programs, identification of land use problems, solutions, and land use policy. The Commission would also hold land use conferences, develop a high profile, and generally stimulate public awareness and input into issues. That is, the proposed Commission's functions would become virtually identical to those of the Manitoba Environmental Council. It seems to me that, if provided with a substantially larger budget, our Council, with its accumulated experience — could well develop the capacity to take up the role proposed for the Land Use Commission. Perhaps this should be suggested to our Minister.

My other personal observations were that conference participants were too eager to blame non-farm groups and foreigners for their problems. No evidence was presented to demonstrate that foreign farm owners were mining the land or used inferior husbandry. Land taxes were blamed for removal of water retention areas, etc., whereas a quick calculation indicated that the most likely cause was the profit motive rather than cost savings. Urban expansion was blamed for the loss of farm land, but it seems to me that overall reduced farm productivity on a unit area basis has been due more to poor husbandry than to conversion to non-agricultural uses. This is not to deny the need for regulation and control, but I question the facile, superficiality of many of the arguments. For example, would remission of taxes on poorly drained land result in retention of a slough or would it merely permit a greater profit to be made from the land involved?

Clearly, there needs to be a continued effort to improve conservation techniques. However, the use of incentives may not be enough. Expropriation of land required for the public good might be the only answer. The debate should continue.

Those wishing to learn more of the conference proceedings can consult the published report now available. [for reference see * below — ed.].

* * *

Received for Publication, July 2, 1981.

*Proceedings: Manitoba Land Use Conference, March 11 and 12, 1981, Winnipeg Convention Centre, 102 p. [Chairman, Conference Steering Committee, A. M. Runciman (United Grain Growers) [Cat. No. — E.M.D. Library HO 320, M3, 1981].

ADVISORY COUNCILS — BASIL ROTOFF

The fifth meeting of the Federal/ Provincial Advisory Councils was hosted by the New Brunswick Environmental Council at the Algonquin Hotel, St. Andrews-by-the-Sea, N.B. from June 15-18, 1980. This continued the tradition of alternating the meetings between eastern and western Canada. The site, according to the New Brunswick chairman, "is one of the most beautiful spots in our very beautiful Province, and because it is situated where the sea meets the land, an area of great ecvironmental complexity, of interactions, and of divided jurisdictions." The Manitoba delegates, Mr. Keleher and myself both came to agree with this appraisal.

This report provides some notes on the meeting as Proceedings have been prepared and issued by staff of the Secretariat of the Canadian Environmental Advisory Council. The first item of business was to review the actions taken by individual Councils to the resolutions adopted at Hecla. Most of the Councils did forward them to their Ministers. The second subject discussed was the effectiveness of individual Councils. All present (British Columbia, Newfoundland and Prince Edward Island were not represented) felt that they had been effective to a varying degree. Most Councils outlined their terms of reference and indicated subjects being tackled within these areas. Some statements of individual Councils have been excerpted from their presentations.

In Alberta, that Council's recommendation for public hearings on the impact of the oil and gas exploration and development in the Green Zone was rejected. Unfortunately, there has been little public support for such an examination so that the Government is on the same side as public opinion. The Alberta Council believes that it has been an extremely effective advocate for the environment of Alberta — not so much that they have won all the battles but because they have brought forward for the debate the most critical questions. In New Brunswick, an early recommendation of that Council led to the provincial policy in 1975 that an environmental impact assessment may be required for any project where provincial monies are involved. With regard to ecological reserves, 7 have been approved, 1 is pending and commitments for 5 more have been made. Responsibility for the Pesticide Control Act was shifted from the Department of Agriculture to the Department of Environment. This resulted in several positive benefits according to the New Brunswick Environmental Council, one of the groups requesting the change. Another change has been the implementation of an Energy Secretariat. Its work has been concerned with an energy balance for New Brunswick and alternative technologies, particularly those depending on wood. The New Brunswick Council has also tried to develop environmental goals but found it a difficult and time-consuming process. This task led to the subject of

environmental rights which has been deferred to the future. The Nova Scotia Environmental Council has learned that public meetings are the least effective method of evoking responsible public participation. A more effective one is to assist citizen groups with local concerns. This frequently involves provision of an initial chairman from their Council to organize working committees to define the issues and to develop alternatives. There has been no outright governmental rejection of any of the recommendations of the Nova Scotia Council since its establishment seven years ago. But governmental priorities vary from the Council's and this has necessitated, at times, a patient wait for the appropriate time for recommendations to be effected. The Quebec Advisory Council on the Environment felt that, aside from a few exceptions, its recommendations have been well received by its Minister and is satisfied that they influence environmental policies and legislation. The Saskatchewan Environmental Advisory Council has reviewed, at the Minister's request, many of the Department's policies and programs including the Air Pollution Control Act, Environmental Impact Assessment Policy and Guidelines, Grazing Land Improvement Program Guidelines and the Hazardous Substances Control Regulations. On its own initiative, Council has reviewed other subjects. The best success was achieved with the land use issue which resulted in the formation of a Land Use Policy Development Public Advisory Committee. A formal policy eventually will be a reality. Some governmental actions cannot directly be attributed to the Saskatchewan's Council's efforts. The Department of the Environment now has more regulatory clout instead of merely being a co-ordinating agency. During the last session of the Legislature, four major pieces of environmental legislation were introduced, including an Ecological Reserves Act and a Drainage and Flood Control Act. There have been disappointments. The list would include a wide assortment of energy issues, land reclamation, and the Churchill River Heritage Waterway. This council attempted a future problems project. The response from the public component was a disappointment, the major assigned cause being the council's lack of resources to conduct an undertaking of this nature. Some incipient problems, such as acid rain and Dutch Elm disease, were identified. Another public activity was the preparation and distribution of an audio-visual presentation on the Grasslands National Park proposal. Although it had beneficial results, it entailed an excessive expenditure of time and consumed nearly 50 percent of the annual budget. The Manitoba presentation was made by our Executive Secretary and has been included in this Annual Report.

The main emphasis of the meeting then was considered, being detailed presentations on four topics by invited speakers. As usual, land use was treated but the other subjects were new — coastal zone management, acid rain and the Pittson proposal.

In the land use talk, the point was made that technology influences land use practices, the example used was horse-powered versus tractor-powered operations. Another factor is the unit cost of the land. As it rises, more intensive rather than extensive utilization takes place. The author proposed two categories of land use — good or beneficial and bad or detrimental. Having made this distinction, he indicates that it is difficult to apply in individual instances because of lack of information as to the impact that a particular practice has on the immediate land and on the surrounding environment. He believes that rather than dealing with the symptoms of land use practices, we

should be tackling the problems through collection of materials to resolve them.

The talk on coastal zone management was concerned with the East Coast but could be applied elsewhere by a different selection of examples. Because of the complexity of this system, the existing single resource management schemes are inadequate. Also, the users of the resource are more difficult to manage than the resource itself. The management area in the Maritime Provinces consists of 6,700 miles of coastline. Present pollution conditions necessitates the closure of over 200 shellfish areas so that the financial return of 1.5 million dollars is only a small fraction of the potential returns.

Pollution is also encroaching on the East Coast marine estuaries in which many commercial fish species are dependent. Ten percent of the estuaries are presently affected by severe pollution. The situation can only deteriorate with anticipated offshore oil and gas developments and construction of new deep water ports with their supertanker traffic unless a zone management strategy is quickly implemented.

The third presentation dealt with Long Range Transport of Air Pollution (LRTAP) or more specifically acid rain. Rather than deal with the information provided therein, a review of the Manitoba situation dated Sept. 22, 1980 by the Environmental Management Division is supplied.

Acid Rain and the Manitoba Situation

Acid rain originates where sulphur dioxide or oxide of nitrogen are emitted into the air either by burning of fossil fuels containing sulphur or nitrogen compounds, or when sulphur containing ores are smelted. Once in the atmosphere, these pollutants react with water vapour under the action of ultraviolet light forming sulphuric and nitric acids. These acids dissolve in the rain and snow making the precipitation acidic. The acidic precipitation interacts with soil, vegetation, lakes and terrestrial and aquatic organisms with potential adverse effects. The pollutants which produce acidic precipitation can freely travel anywhere, therefore, the areas affected by acidic precipitation could be far away from the pollutant source.

The Province of Manitoba has two major sources of sulphur dioxide: Flin Flon and Thompson. The amount of sulphur dioxide released into the atmosphere by these two sources is limited to a level set by a Clean Environment Commission Order. The limit is periodically reviewed as the technology improves.

However, Manitoba is in a fortunate position, like most of Western Canada, with respect to acid precipitation for two main reasons: a) the emissions of pollutants are low in comparison to those in Eastern Canada and, b) the acidity in the precipitation is neutralized by alkaline dust in the atmosphere blowing from the prairies.

Nevertheless, the Environmental Management Division has investigated more in detail, the Manitoba situation with respect to acid rain. To this effect, maps have been prepared to identify those areas within the provincial boundaries which are potentially sensitive to acidic precipitation. The parameters used to establish this sensitivity were derived from those cited by the federal LRTAP (long range transport of air pollutants) task force. These parameters include geological strata, surface soil deposits, forest productivity, forest utilization and surface water quality data. The maps indicate that the Canadian Shield, which extends in a northwesterly direction through the Province from the Ontario border to Saskatchewan, is an area relatively sensitive to acidic precipitation insofar as soils and vegetation cover is

concerned. The northwestern corner of the Province and a portion east of Lake Winnipeg between Latitude 52 and 54 is relatively sensitive to acidic precipitation insofar as surface waters is concerned. The remainder of the Province is practically immune to acidic precipitaiton.

In addition, the Environmental Management Division is in the process of installing two precipitation network stations, one at Norway House and the other at Island Lake to monitor essentially the pH of the precipitation on a continual basis. These stations complement the CANSAP (Canadian Network for Sampling) for Manitoba which is operated by the Federal Atmospheric Environment Service. The present CANSAP network includes four stations in Manitoba at the following locations: Bissett, Dauphin, The Pas and Churchill.

Data, collected so far, indicate that the precipitation in Manitoba is not acidic [attached map not included], and the surface waters are also not acidic.

The final paper delivered at the St. Andrew meeting was a review of the Pittson Company proposal to construct a marine terminal and oil refinery at Eastport, Maine. Although the terminal is located in the U.S., tanker access can only be via Canadian waters. The tides in this area range between 16 and 24 ft. and the currents exceed 6 knots. Eastport is also the foggiest spot on the U.S. eastern seaboard. Tanker traffic will inevitably result in oil spills which will damage the Canadian herring and soft shell clam fisheries. A field trip to Eastport provided delegates with visual proof of the treacherous waters.

The workshop papers considered collectively provided a vivid realization of the presence of interjurisdictional problems, particularly between the United States and Canada. Moreover they indicated that new environmental problems continually arise so that maintenance of quality environmental conditions requires every increasing effort.

The remainder of the meeting was devoted to the development of resolutions which were adopted at the final session. As they have been issued to the Council, I would now request their consideration.

* * *

Prepared February, 1982.

A. Resolutions on Ecological Reserves

At a special meeting of those Councils bearing some responsibility for Ecological Reserves, it was Resolved:

1. That The Joint Councils request the federal Minister of the Environment to pursue vigorously the creation of Ecological Reserves on appropriate federal lands throughout Canada.
2. That The Joint Councils request the Canadian Environmental Advisory Council to pursue with the federal Minister of the Environment that his Department support a National Ecological Reserves Co-ordinating Committee. The committee would function as a clearing house for information on Ecological Reserves in Canada.

B. Recommendations on LRTAP

Representatives of Canadian Environmental Councils, having examined and considered the subject of Long Range Transport of Atmospheric Pollution (LRTAP) recommend that all Ministers of the Environment:

1. Urge the Government of Canada to increase its efforts towards conclusion of a treaty with the United States for correction and control of our mutual LRTAP problem;
2. Urge their own government to be prepared to collaborate in an interjurisdictional arrangement to

ensure immediate compliance with the terms of the treaty;

3. Urge their own governments to accelerate education and research in atmospheric chemistry and the effects of airborne pollutants; and
4. Examine the alternatives available for mitigating the effects of past airborne pollution.

C. Recommendations on Shore Zone Management

The Joint Canadian Environmental Advisory Councils go on record as strongly supporting the principles of Shore Zone Management agreed to by the Canadian Council of Resources and Environmental Ministers.

The Canadian Environmental Advisory Councils recognize that the imminent production of off-shore oil and gas necessitates a system of short (exploration) and long term shore zone planning that will minimize adverse environmental effects.

In carrying forth the principles endorsed by the CCREM we recommend that priority be given to the following areas of concern:

a) Identification of renewable and non-renewable resources which could be adversely affected.
b) The necessity for relevant basic and applied research.
c) The development of appropriate physical and institutional models.
d) The identification of sensitive ecological areas within shore zones.
e) The necessity for environmental impact study for any significant project.
f) The development of appropriate public information programs.

D. Recommendations on Land Use

1. *Recognition that the use made of land is an Environmental issue.*

We urge Councils to impress upon their Ministers of Environment that land use and the control of land use practices are essential components of their environmental responsibilities. While many agencies and jurisdictions have policies, responsibilities and activities that affect the use of land, the Ministers of Environment should be held responsible for ensuring that proper land use practices are carried out in their territories.

2. *Co-ordination of responsibilities and decision making with regard to land use.*

In recognition of the many and diverse agencies with responsibilities affecting land use practices, Councils should press for establishment of co-ordinating mechanisms to obtain information about land use in order to develop appropriate policies to achieve improvement of land use practices.

Specific responsibilities for enforcement of good land use practices should be identified.

3. *The need for better information and understanding.*

Councils should urge Provincial and Federal agencies concerned with support of scientific research to recognize the need for increased and sustained study of land use problems including:

(i) Improved methods and technologies for determining land capability and compiling inventories of land use.
(ii) Methods of identifying and predicting the biophysical consequences of different land use practices or changes in land use and their implications for land productivity and capability.
(iii) Methodology for identifying, quantifying, predicting or evaluating the economic and social consequences of land use changes.

4. *Citizen awareness, concern and action.*

Councils should urge that information relevant to land use and the effects of land use practices be collected and made available to the public in order to improve citizens' understanding so that they will call for political action to achieve improved land use practices.

In order to obtain this awareness, the following are recommended:

(i) A land use information system should be developed. The system should be designed:
  (a) with the needs of users in mind
  (b) to be able to produce information whenever required even when data are not complete
  (c) to make use of and co-ordinate data from several sources
  (d) to take full advantage of new techniques of information gathering and presentation such as remote sensing, computerized cartography, etc.

(ii) Land use information should comprise:
  (a) Inventories of land use
  (b) data on changes in land use obtained through regular and systematic monitoring
  (c) interpretation of land use data in economic and social terms related to identified time periods and socio-economic assumptions.

(iii) There should be a review of land classification criteria in an environmental context so that the established uniform land use classifications are not misused or misinterpreted but can provide the basis for more useful land capability assessments in each regional or socio-economic situation.

(iv) To make land use information and concerns available and useful to citizens at large, it is necessary to prepare educational materials on land use for both formal and informal instruction, and to devise and carry out publicity and educational programs.

Ministers of the Environment have responsibilities to initiate and contribute to such programs.

5. *Financial aspects of improving land use.*

(i) Councils should urge their Ministers of Environment in concert with the financial and taxation authorities:
  (a) to undertake a systematic investigation of the effects of current real property assessment and taxation policies on land use practices,
  (b) to establish a regular procedure whereby the effect on land use practices is considered when any new government fiscal, resource development, or urban development programs are decided upon.

(ii) Councils should urge that sustained land capability and productivity in relation to current land use practices be taken into account when establishing: quotas for agricultural or forestry production, market targets, incentives for summer fallowing or crop change.

(iii) Councils should urge Ministers of Environment together with Ministers of Agriculture, Forestry and Municipal development to undertake a program for the identification and development of long term incentives for good land use practices. This program should include incentives for maintenance of land capability and where appropriate, for renewal of land productivity through planned multiple or sequential land use.

(iv) Councils should urge that the increased information about land capability and land use practices resulting from modern technology

and better understanding of the socio-economic effects on resource management be applied to the development of better methods of indentifying and defining land units in terms of land use capability for tax assessment, tax deferral, development zoning, or resource planning purposes.

* * *

Adopted, May 8, 1981.

Effective Recommendations — J. J. Keleher

The objective of environmental councils is implementation of its recommendations by the target usually a governmental agency. A measure of its success is the adoption rate of these recommendations. Such calculations generally have a humbling effect on the organization's membership.

Since periodic self-assessment by any organization is beneficial, the topic of council, i.e. recommendations, effectiveness at the 5th joint meeting of environmental advisory councils is a laudable endeavour. Presumably the intent is not to grade the councils, but rather provide beneficial information through a review of each one's successes and failures. Assuming this purpose for the agenda item, the experience of the Manitoba Environmental Council with regard to the outcome of recommendations, will be discussed. Hopefully, after consideration of similar presentations by other councils, it will become evident if certain tactics succeed in various situations and therefore reveal those that are generally successful, without regard to particular circumstances.

The success of a recommendation is determined by three factors — the background information, scope and post recommendation action or "follow-through". Each factor will be considered in some detail.

Frequently, a recommendation fails by lacking corollary information. Thus, recommendations which are prefaced only by a short preamble of "whereas's" have a small likelihood of success. One which provides background information, particularly by examples, seems to be more successful. The additional data help to zoom in on the concern. It more accurately specifies the proponent's ideas and implicitly requires the respondent to present relevant rebuttal. In the case of the Manitoba Environmental Council, the expansion of a concern from a resolution to a brief was not our idea but a directive from the then Minister.

The scope of a recommendation frequently has a bearing on its acceptability. During open Council dabate, some members force changes too extensive in nature. Thus, recommendations dealing with pollution in a particular location or environmental education at specific grade levels were expanded to Manitoba pollution and environmental education deficiencies in the entire school system. While extrapolation did not alter the validity of the cases, the government indicated that nothing could be done because of the cost for a solution to the entire problem. These examples are contrary to the loaves and fishes incident.

Probably provincial councils should be involved only with provincial problems or ones that can be remedied solely through provincial action. To debate issues of national scope, or worse, international, may be both timely and relevant, but adoption becomes more difficult as one expands the jurisdictional base. The acid rain issue probably is a trenchant example. The ideal recommendation, from the effectiveness aspect, concentrates on a fairly narrow problem, soluble by moderate governmental action. Acceptance of our recommendation for a provincial Garrison Diversion Project publication is progress in this issue and exemplifies this point. This does not imply avoidance of substantial issues but suggests that attainable concerns should not be neglected.

Allied to the scope of a recommendation is its public profile. Issues subjected to media attention are difficult to resolve because the government has already established a firm, usually defensive, position. Success of the recommendation depends on an attitude change. An entrenched position is most difficult to alter. In general, then, popular or bandwagon recommendations are less successful than those formulated without the "benefit" of public awareness. The headline recommendation also makes the council indistinguishable from the public. Its sponsor may well wonder why an organization that lacks independent thinking or is always prone to follow the popular view should be supported.

Assuming the adoption of a recommendation with adequate scope and sufficient background material so that its thrust is clear and true is fallacious. Adequate post recommendation action is mandatory. The usual governmental responses to a recommendation is that the problem has been corrected, is being remedied, or is under study. Councils should not be dissuaded by such assertions. Their counter-response should be to verify or monitor the solution or audit the progress of the study. Many studies are instituted to buy time in the hope that the problem disappears with age. Copies of the study, when completed, should be requested and the results assessed. Then, if the conclusions are acceptable, the implementation date should be sought. Many recommendations are unsuccessful apparently because the proponents felt that their activity can cease after directing attention to the problem. Proper follow-through may well turn an ignored recommendation into an implemented one, despite the usual governmental diversion of irrelevance , plain neglect or study. Furthermore, this continued attention leaves no doubt as to the original impetus for the study.

Lack of sustained concentration on the status of previous recommendations is an inherent shortfall of most environmental councils because of their high turnover in membership. Each committee chairman tends to be more partial to his recommendations than those of his predecessor and naturally pays more attention to them. This situation prevailed in the Manitoba Environmental Council until a remedy was devised. One member, the Past-Chairman, now is responsible for keeping track of the status of previous recommendations. This appears to solve the problem of the older but not necessarily the oldest recommendations.

The recommendation which has the best chance of adoption is one of implementable scope, originated by the Council itself, contains adequate peripheral material and is pursued to a logical conclusion. Recommendations containing these characteristics should certainly enhance their chances of implementation and thereby improve the Council's effectiveness.

* * *

RESPONSES TO BRIEFS — ROSEMARY MALAHER

These remarks primarily deal with the briefs passed during the 1979/80 year of the Council.

At the meeting of November the 30th, 1979, the brief passed by the Water & Waste Committee asking that the Minister publish an up-to-date review of the Garrison Diversion Unit was adopted [Annual Report Eight: 1980 p. 44.]. Last year at this time the Past Chairman reported [Annual Report Eight: 1980 p. 52] that the proposal was favorably received. We have heard that this report on the Garrison is in fact being done and is nearing completion. However, it would have been useful if this booklet could have been completed at this time, and I wrote this before Wednesday. Manitobans must be kept aware of the reasons for this dispute with our nearest neighbors. Also, as the delay in printing lengthens, information becomes outdated. And as is common in all printing problems, by the time you get to press you've got to start again.

As of April the 16th, 1981, we received the Minister's response to the brief approved at the December 1st, 1980 meeting of the Council. That was the most recent fall meeting. The Education Committee's brief (included in Annual Report Nine) had recommended that several departments of the government co-operate in the printing of information on Manitoba's environment. The Minister's response was as follows:

Thank you very much for your recent submissions regarding Manitoba's environmental information program. It was most timely that the Council voiced its concerns and recommendations regarding a co-ordinated and systematic approach towards the dissemination of information on environmental matters.

On November 3rd, 1980, my Department established the Community Relations Branch, which has as one of its main responsibilities, the task of heightening public awareness about environmental issues, particularly those affecting Manitoba. Similar to the specific recommendation of your report, the objective of the Community Relations Branch is to provide a co-ordinated and systematic information program on Manitoba's environment. In this respect, the Branch makes every effort to ensure that the information produced reflects a "global perspective" encompassing what is happening in other Government departments, not just our own.

It may not be a coincidence at the moment but there is much discussion over the source of water for the town of Selkirk. Even though a brief regarding the use of Red River water was postponed or in fact defeated at the fall 1979 meeting of the Council [Annual Report Eight: 1980 p. 41], Selkirk has been relying on well water since that time and is now considering further action. The Minister did however respond to this brief which has been published [Annual Report Eight: 1980 p. 52].

Last year at the Annual Meeting on May 2, there were two briefs regarding

hazardous chemicals. These briefs have been published in Annual Report Eight. The first had to do with the collection and transport of hazardous waste chemicals and the second with regard to the reaction of the Environmental Management Division when there is an emergency involving hazardous chemicals. The Minister alluded to his answer to us in his address this afternoon. In his answer dated April 16, 1981 the Minister said:

Procedures are in place to ensure the safe collection and proper disposal of flammable and reactive compounds. New regulations pertaining to the storage and handling of gasoline and associated products and the designation of certain substances as hazardous materials were approved in 1980 and in 1981.

As you are no doubt aware, my Department is actively participating in establishment of waste disposal policy through our consideration of the Reid, Crowther Study. Your recommendations will be considered during this examination process. I am committed to a prudent and rational hazardous waste management system which will be in the best interests of Manitoba from all aspects including social, economic, environmental, physical/geological.

In the interim, personnel of the Environmental Management Division are fully briefed on necessary response procedures, which include appropriate expert's lists. The development of the Government-University Liaison Program was in concert with this objective. The recent establishment of the Community Relations Branch, I trust, will rectify some of the problems previously encountered in ensuring media and public awareness.

I might mention that Dr. Barry Webster is on one of these University Liaison Committees. The regulation mentioned by the Minister with regard to the storage of gasoline and petroleum products [Man. Reg. 156/80] was developed after an extensive investigation by the Clean Environment Commission. Their report, *Report on the Investigation of the Pollution of Underground Water by Refined Petroleum Products* was issued on December 19, 1975. It made many recommendations which seem by and large to have been enacted but which could stand closer scrutiny by the Environmental Chemicals Committee. The report was directly in response to a number of leaking gasoline storage tanks in the Province, e.g. the Birds Hill area.

The other regulation mentioned in the Minister's reply, designating some substances as hazardous materials [Man. Reg. 15/81] lists the following chemicals: Ammonium Nitrate, Hydrochloric Acid, Polychlorinated Biphenyl and Sulphuric Acid. This allows the Minister to issue orders regarding the removal, storage, handling or transport and disposal of these materials under a Section of the Clean Environment Act.

Last spring there was also two briefs regarding land use issues [Annual Report Eight: 1980 p. 33-40]. Any summary here would not do justice to the contents. The first concerned the Clean Environment Commission's recommendations for intensive livestock operations and it reviewed them in relation to a brief which we previously had submitted to the Commission. Mr. Filmon's response dated April 16, 1981 was as follows:

Further to the Council's interest in the recommendation of the Clean Environment Commission regarding Intensive Livestock Production Operations in Manitoba, the Environmental Management Division in concert with the Departments of Agriculture and Municipal Affairs are analyzing the Clean Environment Commission's recommendations with the view to introducing a program with amended regulations. The Council's recommendations are a useful contribution to this review.

In general, may I say that I value the

recommendations of the Manitoba Environmental Council. Independent advisory bodies such as this often stimulate effective and prudent government policy.

No response was made by the Minister to the second extensive brief regarding combining the Conservation Districts Act and the Planning Act for the wise management of both land and water resources. This should be drawn to the Minister's attention or reviewed by the Land Use Committee in the coming year.

Now I would like to delve into the past since I did have a concern. I was Chairman of the Education Committee in 1977 when a resolution by the Committee was approved. [Annual report Five: 1977 p. 28.] It requested facilitating the insurability of vehicles other than school buses for the purpose of transporting students to sites outside of school areas. This was aimed at taking students on field trips to distinct parks and museums to carry out studies on the ecology of various areas of the province. In reviewing amendments to the Highway Traffic Act [Bill 29], the Transportation Minister, Mr. Orchard, announced on March 20, 1981 that the ability to transport students on an irregular basis would be added to the regular insurance schedule. This should be an encouragement to teachers and other groups to make use of the many varied out-of-school facilities in the province which was the intention of the original resolution.

This is all of the material that I have for comment on past briefs. I think it behooves the Committees from time to time to go back over the positions that have been taken and reassess recommendations for the purpose of updating their expressions of concern to the Minister.

* * *

Revised presentation at May 8, 1981 Council meeting.

Children entering a school bus. *Courtesy Winnipeg Sun*

MEMBERSHIP — J. F. PALAMARCHUK

During 1980 and into 1981, your membership committee comprising of Mrs. Schilling, Mrs. Blight and myself assisted by Mr. Keleher, worked diligently updating and monitoring participation in the various committees of the Council. This year brought us closer to establishing increased representation from rural areas.

We also prepared and published an informative pamphlet, which includes an application form. It is now mailed to prospective applicants for better orientation as to the objectives of the Council. We intend to improve it by a revised edition which will carry illustrations of the endangered flora and fauna, thereby pointing out one of the environmental concerns of the Council, as well as making it more substantial. This is part of the designated funds in our increased 1981/82 budget.

In order to improve the qualitative and quantitative participation of our membership, we intend to prepare a questionnaire for all Council organizations. It will update our information about them, e.g. number of members, their publications, and ensure that:

(a) Council receives those publications,
(b) Monitor their media releaseas,
(c) Organizations indicate extent of Council involvement,
(d) Identify their Council representative.

All Technical Committees meeting aftermath (Sept, '80) — (Left to right) Lewis McCall, Lloyd Rathai, Basil Rotoff and David Punter. J.J.K.

The Council thereby would benefit from a greater public image and increase its effectiveness by implicit improved participation in environmental concerns of its members. Furthermore this detailed informative approach is important in building a constructive relationship between the Council and its organizations as to the objectives of the Council and its high priority concern of increasing the public's environmental consciousness.

fifteen are representatives of organizations. For the record, membership as of March 31, 1981 will be provided in a Table of the Annual Report.

I would like to conclude by naming members who have joined us this fiscal year. They are recognizable by the red dot on their lapel I.D. card. Please help the Committee in making them welcome to the Council. The new members, who are requested to stand when I call out their

Summary of Council Representation (Data as of March 31, 1981)

	I[a]	O[b]	T	%
SEX				
Males	42	37	79	85
Females	7	7	14	15
	49	44	93	100
REGION				
Central Plains	1	0	1	1
Eastern	11	4	5	6
Interlake	0	2	2	2
Northern	2	3	5	6
Parkland	4	1	5	5
Pembina Valley	1	5	6	6
Western	4	1	5	5
Winnipeg	36	28	64	69
Total	49	44	93	100

a.: Individual member b.: Organization member

I wish to extend my sincere appreciation to Mrs. Schilling, especially for her invaluable help in preparation of our pamphlet, to Mrs. Blight of her undaunted support and help and to Mr. Keleher for his tireless participation, advice and constructive criticism.

Today we have 91 members, 47 of whom are private citizens and 44 organizational representatives. Twenty-eight of the total are rural members, thirteen of whom are private citizens and

name are as follows: Mr. Ivan Brown, Mr. R. A. Dale, Mr. Lloyd Davies, Mr. R. DeMeyer, Mr. Thomas Drew, Mr. D. L. Fletcher, Mr. P. J. Fogarty, Mr. Rod B. Fowler, Mr. Klem Froning, Mrs. Pat Johnstone, Mr. Bob Lepischak, Dr. Wm. Lockery, Mr. Harold MacDonald, Mr. Bodhan Palmarchuk, Mr. Gordon C. Pullan, Dr. Richard Rounds, Dr. Chris Stadel, Mr. George M. Takashima.

* * *

Presented at May 8, 1981 Council Meeting.

MEMBERSHIP APPLICATION

TO: Manitoba Environmental Council, Box 139, 139 Tuxedo Ave., Winnipeg, MB R3N 0H6

I hereby apply for membership in the Manitoba Environmental Council and understand it is a Ministerial appointment. Membership is for ☐ myself; ☒ organization.

Environmental Interests *(attach extra page(s) if required)*

1st fold

(If organization application, insert representative's information)

Name: ROD B. FOWLER Address: 532 OXFORD ST.

Occupation: PROVINCIAL MANAGER - MANITOBA

Phone: Business: 477-1760

Residence: 453-8827

Organization: DUCKS UNLIMITED (CANADA)

Address: 1190 Waverley St.
Winnipeg, Manitoba
R3T 2E2

Purpose: Preservation, restoration and maintenance of waterfowl habitat.

2nd fold

Phone: 477-1760

No. of contributors: Manitoba 1,000
Canada 8,000
U.S. 260,000

Choose one Committee:

☐ Energy	☐ Envir. Impact Review	☒ Wildlife
☐ Envir. Chemicals	☐ Land Use	☐ Publications
☐ Envir. Education	☐ Water & Waste	☐ Membership

Date: October 30, 1980 Signature: RB Fowler

(If organization, position or title)

First submission of first application form, from Council pamphlet.

PUBLICATIONS — A. C. MANIAR

During the year there were two Council publications — our informational pamphlet published in October and Study 14, "Parks for Manitoba: Policy and Practice" issued last month. No cartoon contest was held. This sounds as if the Committee and its work have stagnated. Doubtless our actual output has diminished but, I believe, that a sounder footing has been established and will eventually show more positive results. Allow me to briefly elaborate on this viewpoint.

The Committee has decided that a new publication series be instituted. As mentioned by our past Publications Chairman, Denis Ringland, it would contain a variety of materials — briefs that are too long for inclusion in Annual Reports, separate pieces of work that presently, if desired to publish, have no logical mechanism, transitory material that has a time-dependent appeal. Not only would the initiation of this series expedite the publication of specific items but it would also free up the Annual Report and Studies from them. Although the material might be issued in a variety of ways, there would be the common link of being contained in a single series. I hope there is a librarian in the audience who should applaud this attempt to facilitate the cataloguing of this Council's output. The Committee will be firming up its design over the summer.

The Study Series was completely redesigned, literally from cover to cover. It is not to be expected that there will be universal agreement with the design but at least I hope you will agree that it's novel. The design was facilitated by our 1980 step student, Nick Burns.

The Council's pamphlet is serving a worthwhile purpose. Now that we have one, one wonders how we got along without it. The present one is only temporary. The Membership Committee, which was responsible for its creation, is working on a new version, that will include pertinent illustrations. I believe the revision will further enhance the Council's image.

Other Council manuscripts are in the process of being prepared for publication. The significant point here is that the editing process is now working in parallel rather than in series, to try an electrical analogy. The one closest to completion is Annual Report Eight. Ninety percent has been typeset and the acquisition of illustrations is well in hand. The theme will be Hecla Island, the location of the 4th Joint Advisory Councils' meeting, which we acted as hosts. It should be published before this fall.

As indicated, there was no Cartoon Contest or Displays this year chiefly because of a lack of finances although manpower did play a part. It was evident that more and more effort had to be expended each year to maintain the number of entries received. Perhaps a rest is in order. We have on hand a plentiful supply of cartoon material for our publications so that the temporary suspension for one year will not affect this

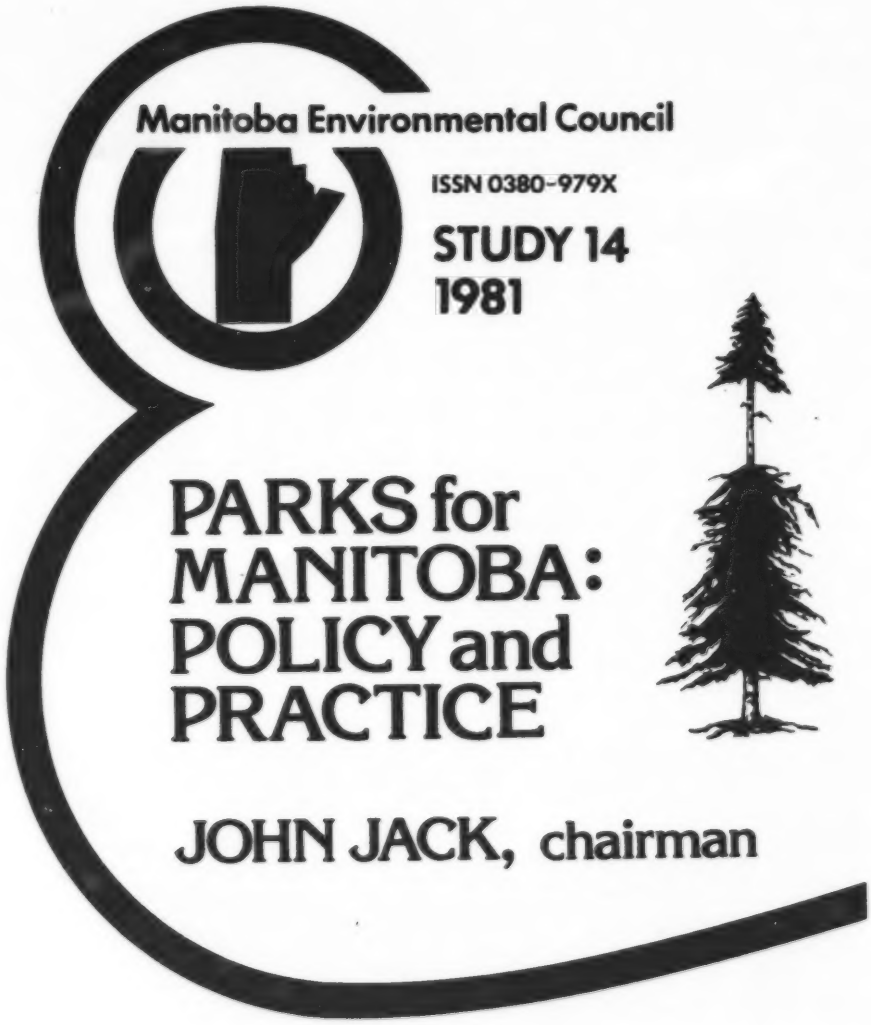
purpose of the contest.

Before concluding, I would like to make members aware of a new development within the Environmental Management Division. Now the Division Library Staff prepare a biweekly Newspaper clipping "publication." This is an excellent new venture and I would like to complement them on it. Members who are interested in a particular environmental story relative to Manitoba should contact the Council office. Please provide the date of the story so that it can be easily located. This service will also benefit our office since now we can dispense with clipping newspapers for pertinent stories.

I hope that this information will satisfy members about the activities of this Committee. If not, I will be only too happy to answer any questions that are raised.

* * *

Presentation for May 8, 1981 Council meeting.



NOMINATING — ROSEMARY MALAHER

The Board of Directors, at its meeting of February 9, 1981 elected the following nominating committee: Rosemary Malaher, Chairman, Onno Kremers, and Colin Holbrow. Its task was to propose a slate of executive officers and regional chairmen for election at the annual meeting on May 8, 1981. There being no other nominations the Committee's selections were elected by acclamation. The office of Vice-Chairman became vacant shortly thereafter with the resignation of Dr. Alan Beaven. The Board filled the position by a transfer of Derek Muir from Secretary to Vice-Chairman and the appointment of Mrs. Donna Blight as secretary. The revised slate of elected officers for the Council's 1981-82 term follows:

Chairman	—	Bill Kennedy
Vice-Chairman	—	Derek Muir
Secretary	—	Donna Blight
Central Plains	—	J. A. Knight
Eastern	—	R. D. Howard
Interlake	—	Bill Aitken
Northern	—	Chris Sundevic
Pembina	—	Betty Pawlicki
Winnipeg	—	J. F. Palamarchuk

* * *

Board of Directors, 1980-81. (Left to right) Rosemary Malaher, J. F. Palamarchuk, A. C. Maniar, David Punter, Basil Rotoff, D. Muir, Lewis McCall, H. J. Selwood, J. B. Nickels, Bill Aitken, J. J. Keleher. D. Landy/MGIS

HONOURARY MEMBERS

Honourable Warner Jorgenson
Minister of Consumer and Corporate
Affairs and Environment
(To Jan. 15, 1981)

Honourable Gary A. Filmon
Minister of Consumer and Corporate
Affairs and Environment
(From Jan. 16, 1981)

Mr. J. E. Mason
Deputy Minister, Dept. of Consumer
and Corporate Affairs and Environment

Dr. W. George Bowen
Assistant Deputy Minister
Dept. of Consumer and Corporate
Affairs and Environment

Miss Catherine Howlett, Reg. N.A.P.
Parliamentarian.

* * *

COUNCIL MEMBERS

(Unless noted, membership is for period April 1, 1980 - March 31, 1981; asterisk denotes "charter" member)

Dr. P. W. Aitchison, *Winnipeg**

Dr. P. W. Arntfield, *Winnipeg*

Mr. M. S. Antonation, *Shoal Lake*

Mr. W. Aitken, *Arborg*

Mayor Charles Balcaen, *Selkirk*
(To Feb. 2, 1981)

Dr. Alan Beaven, *Winnipeg*

Dr. William Bell, *Winnipeg**

Mr. C. P. Bennett, *Winnipeg*

(Mrs.) Donna Blight, *Winnipeg*

Mr. H. Bloy, *Winnipeg**

Mr. Ivan Brown, *Miami*

(Mrs.) Nancy Cornish, *Brandon*

(Mrs.) Jo-Anne Crowe, *Winnipeg*
(From March 2, 1981)

Mr. Gordon Dagg, *Brandon*
(From June 13, 1980 to Dec. 1, 1980)

Mr. R. A. Dale, *Pinawa*
(From June 30, 1980)

Councillor Lloyd Davies, *Selkirk*
(From Dec. 8, 1980)

Dr. David B. Dawes, *Winnipeg*

(Mrs.) Kay deJong, *Winnipeg*
(To April 3, 1981)

Mr. R. DeMeyer, *Oak Bluff*
(From June 13, 1980)

Mr. Dennis Dempsey, *Winnipeg*
(From June 12, 1980)

Mr. Harold Driedger, *Winnipeg*

Mr. Norman Edie, *Dugald*
(From April 14, 1980)

Mr. Frank Elvers, *The Pas*
(To April 25, 1980)

Dr. W. S. Evans, *Winnipeg*
(To April 30, 1980)

Mr. Wes Finlayson, *Winnipeg*

Mr. Douglas Fletcher, *Carman*
(From Feb. 2, 1980)

Mr. P. J. Fogarty, *Thompson*
(From Aug. 8, 1980)

Mr. Rod B. Fowler, *Winnipeg*
(From March 2, 1981)

Mr. Klem Froning, *Winnipeg*
(From Feb. 2, 1981)

Mr. Dale F. Fuga, *Winnipeg*

Mr. Timothy Fultz, *Winnipeg*

Mrs. U. A. Grant, *Winnipeg*

Mr. Gerald D. Harder, *Carman*

Mr. David Hatch, *Winnipeg*

Mr. Denis Hindson, *Thompson*
(To Feb. 2, 1981)

Mr. Colin Holbrow, *Winnipeg*

(Mrs.) Grace Holloway, *Winnipeg*
(To June 11, 1980)

Mr. R. D. Howard, *Carman*

Mr. F. J. Humphries, *Winnipeg*

Mr. Bob Imrie, *Flin Flon*

Prof. F. M. Kelly, Winnipeg*

Mr. Hans Kerr, *Winnipeg*
(To March 2, 1981)

Mr. Edward Klassen, *Homewood*
(To April 14, 1980)

Mr. J. A. Knight, *MacDonald*

Mr. Onno Kremers, *Winnipeg*

Dr. A. M. Lansdown, *Winnipeg*

Mr. E. Lovelace, *Winnipeg*

Mr. Harold MacDonald, *Winnipeg*
(From March 2, 1981)

Mr. J. A. MacDonald, *Brandon**

(Mrs.) Dawn MacFarlane, *Selkirk*
(To Dec. 8, 1980)

(Mrs.) Rosemary Malaher, *Winnipeg**

Dr. A. C. Manlar, *Winnipeg*

Dr. Diane Malley, *Winnipeg*

Mr. Oscar Mallory, *Winnipeg*

Ms. Jane Mauer, *Winnipeg*

Mr. Lewis McCall, *Winnipeg*

Mr. Tom McLauchlan, *Winnipeg*

Dr. D. Muir, *Winnipeg*

Mr. Wayne Neily, *Winnipeg*

Mr. Laurie Nairn, *Winnipeg*
(To Feb. 2, 1981)

Dr. J. B. Nickels, *Winnipeg*

Mr. Roland Painchaud, *Winnipeg*
(To June 12, 1980)

Mr. Bohdan J. Palamarchuk, *Winnipeg*
(From March 2, 1981)

Mr. J. F. Palmarchuk, *Winnipeg**

(Mrs.) Gwen Parker, *Ste. Agathe**

Mr. N. M. Patterson, *Winnipeg*

(Mrs.) Betty Pawlicki, *Winnipegosis*

Mr. Alex Penman, P.Eng., *Winnipeg*

Mr. Ronald Phillips, *Winnipeg*
(From June 11, 1980)

(Mrs.) Violet Ploshynsky, *Ethelbert*
(From June 13, 1980)

Mrs. Joanne Pritchard, *Winnipeg*

Dr. William O. Pruitt, Jr., *Winnipeg**

Mr. Gordon Pullan, *Winnipeg*
(From March 2, 1981)

Dr. David Punter, *Winnipeg*

Mr. Lloyd Rattai, *Pinawa*
(From April 25, 1980)

Mr. A. H. Richardson, *Thompson**

Dr. Carl Ridd, *Winnipeg*

Mr. Denis M. Ringland, *Winnipeg*

Dr. I. M. Rollo, *Winnipeg*

Mr. John L. R. Ross, P.Eng., *Winnipeg*

Professor Basil Rotoff, *Winnipeg*

Dr. Richard Rounds, *Brandon*
(From June 13, 1980)

Mr. A. St. Hilaire, *St. Jean*
(To July 4, 1980)

Mr. Ivan Sabesky, *Winnipeg*

Mrs. R. Schilling, *Winnipeg*

Mr. Gunter A. Schoch, *Winnipeg*

Professor H. J. Selwood, *Winnipeg*

Dr. Jennifer Shay, *Winnipeg*

Mr. Eugene Sheremeta, *Winnipeg*

Mr. John Silver, *Winnipeg*
(To June 11, 1980)

Mr. S. Skrypetz, *Morden*
From July 4, 1980)

Dr. Lawrie B. Smith, *Winnipeg*
To June 13, 1980)

Dr. C. Stadel, *Brandon*
(From June 13, 1980)

Dr. L. J. Stephen, *Dauphin*

(Mrs.) Karen Stonyk, *Winnipeg*

Mr. Chris Sundevic, *Thompson*

Mr. Rahesh Syal, *Winnipeg*

Mr. George M. Takashima, *Winnipegosis*
(From June 13, 1980)

Mr. W. H. Toews, *Lowe Farm*

Dr. W. J. Turnock, *Winnipeg*
(To Feb. 2, 1981)

Mr. Walter Von Schoenhausen, *Winnipeg*

Mr. H. A. H. Wallace, *Winnipeg**

Dr. C. Peter Warren, *Winnipeg*

Dr. G. R. B. Webster, *Winnipeg*

Mr. Barry Wild, *Winnipegosis*

Dr. Harvey Williams, *Winnipeg*
(From June 13, 1980)

Mr. Irwin H. Wiseman, *Winnipeg*

ADVISORS

The Council wishes to acknowledge the technical assistance received from the following persons during the period covered by this report:

Prof. E. Dore—Winnipeg

Mr. Thomas W. Drew—Smithville, On.

Dr. L. C. Dugal—Winnipeg

ORGANIZATIONS REPRESENTED ON COUNCIL

(Unless noted, membership is for period April 1, 1980 to March 31, 1981)

Association of Manitoba Archaeologists

Canadian Manufacturers Association

Canadian Society of Mechanical Engineers (Man. Region)

Carman District Farm Business Association

Citizenship Council of Manitoba

Canadian Forestry Institute (Man. Div.)

Community Planning Association of Canada (Man. Div.)
(To June 12, 1980)

Consumers Association of Canada

Ducks Unlimited (Canada)
(From March 2, 1981)

East-Man. Regional Development Corporation

Entomological Society of Manitoba

Four Nations Confederacy

Home and School Parent-Teachers Federation of Manitoba

Interlake Development Corporation Inc.

Junior League of Winnipeg

Manitoba Association of Registered Nurses

Manitoba Association of Urban Municipalities

Manitoba Bar Association

Manitoba Environmental Research Committee

Manitoba Chambers of Commerce

Manitoba Farm Bureau

Manitoba Federation of Labour

Manitoba Forestry Association Incorporated

Manitoba Historical Society

Manitoba Institute of Agrologists

Manitoba Library Association

Manitoba Medical Association

Manitoba Naturalists Society

Manitoba Nursery and Landscape Association

Manitoba Parks and Recreation Association

Manitoba Teachers Society

Manitoba Wildlife Federation

Manitoba Women's Institute

Mining Association of Manitoba

National Farmers' Union

Norman Regional Development Corporation

Parkland Regional Development Corporation

Pembina Valley Regional Development Corporation

Provincial Council of Women of Manitoba

Town of Selkirk Council

Union of Manitoba Municipalities

United Steelworkers of America (Local 6166)

United Steelworkers of America (Local 7106)

University Women's Club of Winnipeg

Winnipeg Labour Council

Zoological Society of Manitoba (To April 30, 1980)

* * *

COUNCIL CHAIRMEN

The first organizational meeting of the Council was held on January 28, 1972 when various task forces were established to formulate the Council's direction and operation. At the second meeting on November 17, 1972, an Executive was elected with Lloyd Axworthy as Chairman. The election of officers was changed to the Annual Meeting in the spring of 1974. A list of Council Chairmen follows:

1972-73	Lloyd Axworthy
1973-74	Lloyd Axworthy (To Dec. 5, 1973)
1973-74	Ken Arenson (From Dec. 5, 1973)
1974-75	Ken Arenson
1975-76	Allen M. Lansdown
1976-77	W. J. Turnock
1977-78	Onno Kremers
1978-79	David Punter
1979-80	Rosemary Malaher
1980-81	Basil Rotoff

* * *

PUBLICATIONS

Publications are distributed, without charge, upon written request and to those on the mailing list which includes Manitoba public libraries and many Manitoba school libraries. Council publications are listed in *Canadiana* and the Queen's Printer (Manitoba) Monthly Checklist. Publications issued after 1976 are recorded on microfiche in *Microlog*, available from Micromedia Limited, Toronto.

Issued

Annual Report One, 1973, 32 p., 1973 — out of print

Annual Report Two, 1974, 72 p., 1974 — out of print

Annual Report Three, 1975, 54 p., 1977

Annual Report Four, 1976, 79 p., 1977

Annual Report Five, 1977, 110 p., 1978 — out of print

Annual Report Six, 1978, 87 p., 1979 — out of print

Annual Report Seven, 1979, 148 p., 1980

Annual Report Eight, 1980, 101 p., 1981

Study 1, 1974, 4 p. *Manitoba Environmental Problems and Public Opinion* by J. J. Keleher and Karen Z. Hendin — out of print

Study 2, 1974, 61 p. *Garrison Diversion Project Presentations*, W. G. Leitch and J. J. Keleher, eds. — out of print

Study 3, 1974, 4 p. *Manitoba Environmental Agencies and Activities* by J. J. Keleher — out of print*

Study 4, 1975, 171 p. *Impacts of the Garrison Diversion Unit on Canada* by D. H. Boyd — out of print

Study 5, 1975, 130 p. *Manitoba 2000: Population Size and Distribution*, K. B. Richmond and J. J. Keleher, eds.

Study 6, 1975, 127 p. *Nuclear Energy: Fact and Fantasy*, Ken Arenson, Chairman

Study 7, 1977, 35 p., *The Winnipeg Townscape: A Survey Guide* by H. J. Selwood — out of print

Study 8, 1977, 130 p., *Rural Land Use Conflict: Some Solutions*, William Bell, Chairman — out of print

Study 9, 1977, 162 p., *The Energy Issue: Demand and Supply*, W. J. Turnock, Chairman

Study 10, 1978, 145 p., *Manitoba Water Quality Objectives: How far do we go?* Alex Fedoruk, Chairman

Study 11, 1978, 37 p., *Trees and Pesticides: An Environmental Dilemma*, Peter Aitchison, Chairman — out of print

Study 12, 1978, 112 p., *Winnipeg 100: Alternative Futures*, Ken Arenson, Chairman

Study 13, 1979, 51 p., *Environmental Education: Hope for the Future*, Rosemary Malaher, Chairman

Study 14, 1981, 48 p., *Parks for Manitoba: Policy and Practice*, John Jack, Chairman

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* *A revised version of this publication is available (cf. Info. Ser. No. 9, 1976, 27 p.) from the Environmental Management Division, Department of Northern Affairs, Environmental Management.*

Forthcoming

South Indian Lake and Hydro Development

Red River Flooding: Causes and Solutions

Hazardous Chemical Wastes: Many Problems, Some Solutions

* * *

BRIEFS

This section is a compilation of briefs i.e. resolutions that were prepared by Committees, etc. in response to specific issues or subjects. They are not regarded as publications and therefore are not automatically distributed. Copies will be made available upon request until the supply is exhausted. Some of the briefs are published in the Annual Report. This list is for the period April 1, 1980 to March 31, 1981. However, briefs identified by the **bold face** source citation were prepared in conjunction with the Annual Meeting of May 8, 1981. They also will be listed in the next Annual Report to provide a correct output for each fiscal year but will then be printed *in italics* to call attention to their double entry status.

Education Committee

— Brief for Council consideration, December 1, 1980 meeting
[re: Manitoba Government Environmental Information]
[Annual Report Nine . . . p.]

Environmental Chemicals Committee

— Brief for Council consideration, May 2, 1980
re: Management of and Regulations Pertaining to Hazardous Chemical Wastes
[D. Muir]
(Annual Report Eight: 1980 p. 23)

— Brief for Council consideration, May 2, 1980
re: E.M.D. response to Hazardous Chemicals
[*Annual Report Eight: 1980 p. 24*]

— Brief for Council consideration, May 8, 1981
re: Aluminum Smelter
[Annual Report Nine . . . p.29]

— Brief for Council consideration, May 8, 1981
re: E.M.D. Hazardous Chemical Program
[Annual Report Nine . . . p.26]

Land Use Committee

— Brief for Council consideration, May 2, 1980
re: A review of the final recommendations of the C.E.C. Report on intensive livestock operations.
[*Annual Report Eight: 1980 p. 33 - 34*]

— Brief for Council consideration, May 2, 1980
re: The Administration, Allocation and Control of Water and Land Resources in Manitoba.
[*Annual Report Eight: 1980 p. 35 - 40*]

Wildlife Committee

— Brief for Council consideration, May 8, 1981
re: Importing and Raising Raccoon Dogs
[Annual Report Nine . . . p.46]

* * *

FORUMS AND TALKS

The following event was sponsored by the Council during the fiscal year:

Hazardous Chemical Wastes: Many Problems, Some Solutions.

G. R. B. Webster, Chairman, J. M. Aitkinson, S. Safe, M. Stailkovich, D. Stuard Hay.

Legislative Bldg., Winnipeg
December 1, 1980.

Eric Marshall, Freshwater Institute, demonstrates the CAN/OLE literature retrieval system to Alex Cross, Genstar Conserv. Syst. *D. Landy/MGIS*

HCW-DEC. 1

We have many problems with & some solutions to **Hazardous Chemical Wastes.** Be at the **Legislative Bldg. Wpg** for expert information & debate.

EXHIBITS 9:30 a.m.-6:00p.m.
FORUM 2-5p.m.
FILM TBA

MANITOBA ENVIRONMENTAL COUNCIL

Further Info 895-5337

FINANCES

The Council is funded by a legislative appropriation to the Environmental Management Division of the Department of Consumer and Corporate Affairs and Environment. The dollar amounts listed are for "other expenditures" and do not include "salaries". Dash denotes missing information. The cost of administration services, e.g. accounting and secretarial, is largely borne by the Division.

Fiscal Year	Voted	Expended	Percent
1971/72	—	—	—
1972/73	2,500	—	—
1973/74	18,200	7,400	41
1974/75	17,100	15,000	88
1975/76	15,100	16,200	107
1976/77	13,100	11,700	89
1977/78	16,300	15,132	92
1978/79	16,900	16,621	98
1979/80	16,900	20,432[a]	121
1980/81	16,900	16,894[b]	99

a: $1912 deferred to 1980/81 accounts and Division paid $1638.

b: Includes $1912 from 1980/81.

Expenditures — 1980 - 81

CODE	ITEM	AMT. ($)
218	Research	450
226	Guard Service	85
34 -	Stationery and Printing	908
346	Publications	3492
351	Postage and Telephone	90
412	Recording Meeting and Typing	2236
456	Computer Services	265
618	Advertising	1362
621	Books	81
65 -	Courier service	148
66 -	Travel	5290
677	Cartoon prizes	425
761	Meals	1849
—	Miscellaneous	213
	TOTAL	16894

REVISED BYLAWS

Article I — Name

1. The name of this Council shall be the Manitoba Environmental Council, hereinafter referred to as the *Council*.

Article II — Object

1. The object of the Council shall be to act as an advisory body to the member of the Executive Council charged by the Lieutenant-Governor in Council with the administration of the Clean Environment Act, hereinafter referred to as the *Minister* for the following purposes: to identify, collect and analyze information on environmental problems; to discuss environmental priorities; and to transmit the results of its activities to the Minister and the public and for the above purposes to initiate and take such action as may be appropriate.

Article III — Minister's Responsibility

1. The Minister shall provide to the Council, usually through his (words importing male persons include female persons) Department:
   i. Finances to adequately provide for Council Activities;
   ii. The services of an Administrative Officer;
   iii. Departmental administrative services, secretarial services and office facilities;
   iv. Services of Departmental personnel as required to facilitate Council activities;
   v. Information as required to facilitate Council activities;
   vi. Other services as may be required which are approved by the Minister.

Article IV — Membership

1. Honourary members shall be
   i. The incumbents of the following positions in the Department: Minister, Deputy Minister and Assistant Deputy Minister responsible for environmental management.
   ii. A Parliamentarian, who shall be appointed by the Minister, upon the recommendation of the Council's Board of Directors, hereinafter referred to as the "Boerd".
   iii. Any other persons appointed by the Minister, on the recommendation of the Board.
2. Regular members, hereinafter referred to as "members", shall
   i. Be residents of Manitoba appointed by the Minister, on the recommendation of the Board but no employee of the Department shall be appointed;
   ii. Be appointed for a two-year term and may be reappointed;
   iii. Submit their resignations in writing to the Minister;

iv. Represent themselves or an organization;

v. Be expected to participate in Council's activities;

vi. Not exceed one hundred (100), exclusive of those who have been granted a leave of absence by the Minister;

vii. Numerically be in proportion, insofar as practical, to the population of the Council regions which they represent.

3. Any group having the following criteria may be considered as an organization for representation on the Council. These criteria apply after April 27, 1979.

i. Be operating in the Province of Manitoba.

ii. Have a membership representing more than 25 persons.

iii. Have members eighteen (18) years or older.

iv. Have regularily elected officers.

v. Must participate in activities of Council through its representative.

vi. Representative must report to his organization on activities of Council.

4. Each organization shall be represented by only one member. With the exception of organizations represented on the Council as of December 1, 1978, constituent bodies of an organization shall be regarded as identical to that organization. The number of members representing organizations shall not exceed fifty (50) percent of the total number of allowable members.

5. Any conduct on the part of an honourary or regular member(s) likely to endanger the welfare, interest or character of the Council shall be investigated by the Board. The Board shall, by a two-thirds vote, recommend to the Council whether the member(s) shall be exonerated, reprimanded, suspended or expelled. The Council shall recommend, by a two-thirds vote, to the Minister that he exonerate, reprimand, suspend or expel the member(s).

Article V — Regional Organization

1. Membership shall be decentralized on regional basis to ensure that the Council reflects the environmental concerns of all Manitobans, has an overview of the environmental priorities of each region, and carries out regional activities.
2. Members shall be assigned to the Council regions in which their residence is located or of their choice.

Article VI — Council Meetings

1. Meetings shall be at the call of the Board. There shall be at least two (2) meetings a year, one of which shall be the annual meeting. The annual meeting shall be the spring meeting.
2. Notice of meetings shall be mailed by the Administrative Officer at least two (2) weeks in advance.
3. A quorum shall be twenty (20) percent of the regular members, exclusive of those on leave of absence.

Article VII — Officers

1. The Chairman shall

i. Represent the Council to the Minister and the public;

ii. Preside at the meetings of Council, Board or Executive Committee;

iii. Have general supervision of all Council activities;

iv. Be an ex-officio member of all committees except the Nominating Committee;

v. Report to the Council at its meetings.

2. The Vice-Chairman shall

i. Preside at meetings of Council,

Board or Executive Committee in the absence of or at the request of the Chairman;

ii. Encourage and assist technical commitees in organizing their activities and co-ordinate those activities which affect more than one committee;

iii. Become Acting Chairman in the event of the Chairman's inability to act.

3. The Secretary shall
   i. Keep the minutes of all meetings of Council, Board or Executive Committee;
   ii. Be Chairman of the Publications Committee.
4. The Past-Chairman shall
   i. Be responsible for adopted Council briefs or resolutions.
5. The Administrative Officer shall
   i. Be appointed by the Minister with the approval of the Board;
   ii. Be responsible to the Chairman for Council activities;
   iii. Have no voting rights.
6. Regional and Technical Committee Chairmen shall
   i. Have minutes of meetings recorded;
   ii. Co-ordinate Committee activities;
   iii. Be empowered to appoint technical advisors;
   iv. Report to the Board of Directors.
7. Other Duties
   i. Officers shall perform such other duties as determined from time to time by the Board.
8. Election, Appointment and Vacancies
   i. The Chairman, Vice-Chairman, Secretary and Regional Committee Chairmen shall be elected at the Annual Meeting and each shall serve for one year or until his successor is elected. The Chairman, Vice-Chairman and Secretary shall not be eligible to serve more than two (2) consecutive terms in the same office.
   ii. Standing Committee Chairmen, except the Regional, Publications and Nominating Committee Chairmen shall be appointed by the Executive Committee and each shall serve for one year or until his successor is appointed.
   iii. The Publications Committee chairman shall be the Secretary.
   iv. The Nominating Committee shall be appointed by the Board.
   v. The Vice-Chairman becomes the Chairman for the remainder of the the remainder of the term upon the Chairman's resignation.
   vi. Vacancies in the office of
      a) Vice-Chairman or Secretary shall be filled by the Board;
      b) Standing Committee Chairmen shall be filled by the Executive Committee;
      c) The Administrative Officer shall be filled by the Minister with the approval of the Board.
   vii. Members shall be advised only of vacancies filled in the office of the Executive.

Article VIII — Boards and Committees

1. The Board of Directors shall
   i. Be composed of the Chairman, Vice-Chairman, Secretary, Past-Chairman, Regional and Technical Committee Chairmen;
   ii. Have full power and authority over Council affairs including
      a) establishing priorities for action,
      b) making recommendations to the Minister,
      c) acting upon the recommendations of the Membership Com-

mittee, recommend to the Minister prospective persons and organizations for membership and terminations from or reappointments to Council.

iii. Appoint ad hoc committees as required;

iv. Meet at the call of the Chairman or upon the request of three (3) Board members, with a minimum of four (4) meetings a year;

v. Have a quorum when five (5) members are present, one of whom shall be a member of the Executive.

2. The Executive Committee shall

i. Be composed of the Chairman, Vice-Chairman and Secretary;

ii. Carry out duties assigned by these Bylaws or by the Board or such other duties as are necessarily required to be performed between Board meetings;

iii. Conduct business by mail or telephone if deemed necessary.

iv. Have its actions ratified by the Board unless they were relevant to the duties as specified by the Bylaws;

v. Meet at the call of the Chairman;

vi. Have a quorum when a majority of its members consider its business.

3. Standing Committees shall be

i. The Membership Committee

ii. The Publications Committee

iii. The Regional Committees

iv. The Technical Committees

v. The Nominating Committee

The Membership Committee shall

i. Be composed of at least three (3) members appointed by the Executive Committee but not more than one member may be a member of the Board;

ii. Serve for a term of one year and may be reappointed;

iii. Recommend to the Board

a) prospective persons or organizations for Council membership;

b) the names of those members or organizations who should be reappointed or who no longer qualify for membership;

iv. Only become involved in the selection of a prospective organizational representative on the Council in order to ensure that the person meets the requirements for membership.

v. Have a quorum when a majority of its members are present.

5. The Publications Committee shall

i. Be composed of the Secretary who shall be Chairman and at least two (2) members appointed by the Executive from non-Board members;

ii. Serve for a term of one year and may be reappointed;

iii. Recommend to the Board the format of each publication series;

iv. Review the Annual Report for publication;

v. Approve for the "STUDY" series original material or material published elsewhere;

vi. Establish and issue standards and instructions to facilitate its work;

vii. Approve, periodically, categories or lists of recipients of publications for educational or reference purposes;

viii. Have a quorum when a majority of its members are present.

7. The Regional Committees shall

i. Be composed of those members assigned to the region;

ii. Become operative upon the election of its chairman;

iii. Identify environmental concerns and problems that affect its region;

iv. Ascertain and receive regional environmental complaints and grievances;

v. Arrange for regional activities including informational seminars;

vi. Have a quorum when ten (10) percent of its regional members but not less than two (2) are present.

8. The Technical Committees shall

i. Be composed of all members who wish to participate;

ii. Become operative upon the appointment of its Chairman;

iii. Be created, combined or dissolved as required by the Board;

iv. Be listed, with its terms of reference, in the Standing Rules;

v. Have a quorum when three (3) members consider its business.

9. The Nominating Committee shall

i. Be composed of three (3) members, appointed by the Board at least one month in advance of the Annual Meeting but not more than one member may be a member of the Board;

ii. Nominate candidates for the offices of Chairman, Vice-Chairman, Secretary and Regional Chairman;

iii. Submit its slate of nominated candidates to the Administrative Officer, with a copy to the Chairman, 30 days before the business portion of the Annual Meeting. This slate shall be sent by the Administrative Officer to all regular members 14 days prior to the said meeting. Furthermore, all members shall be invited to make additional nominations, in writing, to be received by the Administrative Officer no later than 48 hours prior to the commencement of said meeting, specifying that the consent of the candidate has been obtained and the name of the seconder.

iv. Have a quorum when a majority of its members are present.

Article IX — Technical Advisors

1. Technical Advisors shall be particular persons recruited by a Committee from outside the Council to provide information or advice on priorities, projects and subjects.

Article X — Reports and Minutes

1. Reports, minutes and correspondence of Council shall be made available by the Administrative Officer to the public upon written request, provided that consent of any person or organization mentioned therein is given.

2. Minutes of the Board or Committee meetings shall be available only to honourary and regular members upon written request or distributed to them at the discretion of the Administrative Officer.

Article XI — Amendments

1. These Bylaws may be amended by a two-thirds vote of members present and voting at a general meeting, provided that proposed amendments are mailed to members prior to the meeting.

2. The Standing Rules may be amended by the Council at any of its meetings by a two-third vote of members present and voting or by a majority vote with notice.

3. The Standing Rules may be amended by the Board with a two-thirds vote of members present and voting but such amendments shall have force and effect only until the next meeting of the Council unless approved at that meeting.

Article XII — Parliamentary Authority

1. The rules contained in the current edition of "Robert's Rules of Order Newly Revised" shall govern Council in all cases to which they are applicable and in which they are not inconsistent with the Council Bylaws or Standing Rules.

Standing Rules

1. The order of business for Council, Board or Committee meetings shall be at the discretion of its chairman.
2. The geographical boundaries of Council regions shall be identical with the boundaries of the Manitoba Regional Development Corporations regions.
3. With regard to organizational representatives to Council, the need for geographical representation should be considered by the organization.
4. Members who represent organizations are encouraged, where appropriate, to inform the Administrative Officer of their organization's activities relevant to environmental matters.
5. Council's fiscal year shall coincide with that of the Department.
6. Expense claims shall be in accordance with rates provided for government employees. Honourary and regular members residing within the perimeter highway surrounding Winnipeg shall not receive travelling expenses for Council activities occurring within the city of Winnipeg.
7. Authority for Council expenditures shall be vested respectively in the Chairman, if available; if not, Vice-Chairman; if neither, Secretary, except for those within the Administrative Officer's limit of financial authority.
8. The Administrative Officer's limit of financial authority shall be determined by the Board.
9. The Administrative Officer's title shall be determined, from time to time, by the Board.
10. Briefs and resolutions
    i. received 15 days prior to a Council meeting shall be considered at that meeting;
    ii. received less than 15 days prior to a Council meeting may be considered at that meeting if a majority of the members wish to do so.
    iii. sponsored by individuals, even if adopted at a Council meeting, will be referred to an appropriate committee for action.
11. Council business meetings are open to the public who may participate but shall not make motions or vote. they may present their environmental concerns under *New Business* but such presentations shall be subject to time being available. These concerns may be referred to a technical committee. The Chairman shall inform the public of these rules.
12. The news media are encouraged to attend Council business meetings as observers and may be advised in advance of briefs to be presented. The Chairman is responsible for regulating their activities so as not to interfere with the meeting. A table should be provided for their use.
13. The names and terms of reference of the Technical Committees shall be
    i. Energy
        a) To explore energy policies which would ensure a minimum of adverse environmental and social effects;
        b) To monitor, research and inform the public on current energy issues which will have environmental implications;

c) To examine aspects of energy conservation which could be implemented by Manitobans, to inform Manitobans about energy conservation.

ii. Environmental Chemicals
   a) To evaluate ways in which chemicals are used in or inadvertently discharged into the environment;
   b) To recommend appropriate changes and safeguards in registration and control legislation and procedures.

iii. Environmental Education
   a) To seek out and monitor programs of environmental education in Manitoba and elsewhere;
   b) To promote the introduction of the best available courses in environmental education in Manitoba schools and teacher training programs;
   c) To encourage inservice training relating to such courses.

iv. Environmental Impact Review
   a) To identify industrial, commercial, and governmental projects which may have a significant impact on the physical, biological, and resource aspects of the natural and man-made environment;
   b) To evaluate environmental impact statements on such projects;
   c) To evaluate environmental legislation and regulations.

v. Land Use
   a) To monitor the implementation of existing land use policies and regulations;
   b) To recommend means by which land use policy and practice may be improved.

vi. Solid Waste
   a) To examine the capacity and effectiveness of present waste disposal techniques and facilities;
   b) Determine future needs.

vii. Water
   a) To examine the use of water resources, the state of water quality and the effectiveness of legislation dealing with water;
   b) To recommend policies and control measures which will facilitate the conservation and beneficial use of water resources.

viii. Wildlife
   a) To assess the quality of wildlife and wildlife habitat;
   b) To evaluate policies and legislation relating to wildlife and wildlife habitat;
   c) To make recommendations under the Council's "A WILDLIFE Philosophy for Manitoba".

* * *

This revision includes amendments adopted at the Council Meeting of May 8, 1981.

Annual Meeting Luncheon, May 8, '81 (Left to right) Thomas W. Drew, The Honourable Gary A. Filmon, Basil Rotoff, David Punter, W. George Bowen and Bill Kennedy. *D. Landy/MGIS*

ILLUSTRATIONS

The provision of photographs for use in this Annual Report by the undernoted contributors is appreciated:

Manitoba Government Information Services [MGIS]

Manitoba Department Natural Resources [MDNR]

The Winnipeg Sun

COUNCIL STAFF

J. J. Keleher, M.A. — Executive Secretary

Secretarial Pool — Ms. Barbara Deans, Head

S.T.E.P. Student — Mr. Nick Burns, May 12 — August 29, 1980

* * *

Sheryle Garant supervises members' registration at the Annual Meeting, May 8, '81. *D. Landy/MGIS*

COLOPHON

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Cover: General — Hoberg Design
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A	B	C
D	E	F
G	H	I

All of the above symbols represent the number nine as expressed in:

A) Babylonian;
B) Morse Code;
C) Miller's Knots;
D) Greek
E) Chinese (Common);
F) Hindu;
G) Roman Numerals;
H) Binary, and;
I) Maya .

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